Welcome to your new Maronda Home!

Your new Maronda Home is the product of skilled workmanship, combined with quality materials and we are confident you will find it all that you hoped it would be.

By now, you have completed your Pre-Settlement Inspection and very carefully inspected the kitchen cabinets, plumbing fixtures, windows, flooring, appliances, lighting fixtures, and siding for scratches or chips. These items cannot be replaced or corrected after you have had your pre-settlement inspection. We also hope that you paid close attention to all of the supervisor's instructions, particularly on how to light and care for the furnace and water heater.

Our Warranty Service Manager will make a final inspection with you six months after the pre-settlement closing. The purpose of this final inspection is to arrange for repairs on materials which we, as builders, agree to correct. A list of items that need repair, or any questions that you may have, should be presented in writing to Maronda Homes, Inc prior to the six month final inspection. Normally, final repairs and adjustments can be completed within a 30 day period, weather permitting. Only emergency items will be repaired before the final inspection. Please be advised that the one year drywall inspection is to be called in by you the homeowner, if this inspection is wanted.

Every Maronda home complies in full with the rigid building codes of your community. The result is a home constructed with a high standard of quality. Like a new automobile, however, your home requires careful "breaking in," particularly during the early months of occupancy. Properly maintained, this home will serve you, and others who may follow you here, for many years. Certain normal problems will develop during the early months of occupying the home. These are expected, so do not be alarmed if they occur.

This service policy booklet is used in all communities where Maronda Homes builds, therefore you may find references to subjects that do not apply to your particular situation because some of the service policies may vary slightly in different locales and under different building codes, construction procedures, or with different options and specifications used in your particular home. On any specific point concerning your new home, always check with our service department for the exact terms under which corrections or repairs can be made. What applies in one locality may not apply the same way in another. You will find that the Maronda service policy covers most universal situations. It would be a good idea to review this manual before the six months final inspection of your home. Final determination of warranty application and responsibility will depend on local building codes, as well as this Homeowners Guide.

As part of its limited warranty to homeowners set forth herein, Maronda reserves the right to inspect any concerns or issues that the homeowner believes exists regarding the home and to **unilaterally** determine the appropriate course of action. Accordingly, to the extent that the homeowner believes there is an issue or concern regarding the home, the homeowner must promptly notify Maronda in writing of the nature of the claim and provide Maronda with a reasonable opportunity to inspect and determine the appropriate course of action. The homeowner acknowledges and agrees that failure to provide notice and opportunity to Maronda of the claim or concern waives all rights and claims the homeowner has or might have against Maronda under Maronda's limited warranty, including waiving all claims for the costs of repair or alteration. In the event of an emergency situation in which there is no time to notify Maronda of the concern without risk of injury to person or property, the homeowner may take a course of action to remedy the emergency situation. However, the homeowner must then promptly notify Maronda of the concern and provide Maronda with the opportunity to inspect and determine the appropriate course of action.

The following pages of this booklet will outline what materials may undergo changes and the extent and duration of service responsibility the manufacturers or others may have for the work done on equipment installed by them. Service calls should be directed to our warranty service department. Homeowner's maintenance responsibilities are also reviewed, together with valuable tips on the proper care of your home. We urge you to read these pages carefully and to review them from time to time, for we believe they will help you in protecting your investment.

We wish you many happy years in your new home.

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Maronda Homes

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Maronda Homes, Pittsburgh, PA
PRESETTLEMENT INSPECTION REPORT

Name _____ Phone No. _____ Date _____

Lot/Block _____ Plan _____ Street Address _____

The purpose of your Pre-Settlement Inspection is to acquaint you with the maintenance requirements and warranty information about your New Home. During this time, we will familiarize you with the operation of all equipment, review owner maintenance responsibilities and inspect your New Home in accordance with the following checklist. Please follow your Construction Supervisor carefully through each aspect of this orientation. The categories below can be found in great detail by referring to the Maronda Homes-Homeowner's Maintenance and Warranty Manual. The Manual is written in a manner that will help you understand how your New Home functions as well as explain your normal Homeowner maintenance responsibilities. Please initial each category indicating that our Construction Supervisor has discussed this item with you.

____ Air Conditioner and Heating Equipment
____ Appliances
____ Bathrooms: tops, vanities, mirror, medicine cabinets, plumbing fixtures, tubs/showers, toilets
____ Cabinets: Kitchens/Bathrooms/Tops
____ Concrete: Apron/Stoop/Sidewalk/Patio/Interior Floor
____ Asphalt Driveway
____ Doors: Exterior/Interior/Bi-Fold/Sliding/Garage
____ Electrical System: Meter/Circuit Breakers/GFI/Service Panel
____ Electrical Fixtures
____ Exterior Wall: Brick/Siding/Soffit and Fascia/Stone/Int. Block
____ Emergency Phone Numbers
____ Flooring: Carpet/Vinyl/Ceramic Tile/Hardwood/Laminate
____ Final Survey/easements
____ Gutter/Downspouts
____ Interior Walls and Ceilings: Drywall Service Policy - Maronda Homes will not re-paint or sand wall surfaces after final drywall repairs
____ Kitchens: tops, sink, disposal and backsplash
____ Landscaping: Grading/Lawn/Shrub and Tree Policy - Maronda Homes will not replace sod, shrubs or trees beyond this initial acceptance
____ Painting: Maronda Homes does not guarantee the painting beyond this initial acceptance
____ Plumbing System: Water line/Shut-off Valve/Hot Water Heater
____ Sewer/Locate clean outs
____ Roofing
____ Windows/Screens Operation

____ Care was taken to make certain that surface water ran away from the house foundation and that drainage ditches and/or swales are also necessary to divert water from adjoining property owners. I further understand that it will be necessary for me (homeowner) to maintain the established grade, as well as the swales, when any further grading or landscaping is done.

Today I completed a thorough inspection of the above property and the house erected thereon with a representative of Maronda Homes, Inc. of Pittsburgh, PA _____ . I have found the construction of the house and the completion of all inside and outside improvements and accessories to my satisfaction, except as noted below.

We (I) acknowledge that we (I) have received a copy of the Maronda Homes - Homeowner's Maintenance and Warranty Manual. _____ (Initial)

Maronda Homes, Inc. of Pennsylvania agrees to make all necessary completions and corrections outlined below, prior to closing, or as soon as weather permits on any exterior items.

We (I) understand that this list represents **our entire inspection report,** and, except for emergency items, we (I) fully understand that once these items are completed, **no other inspection will be performed until the six month inspection**, which will be due in _____ .

We (I) further agree that there are **no verbal agreements or commitments** regarding this Inspection not set forth herewith. _____ (Initial)

ITEMS FOR CORRECTION OR COMPLETION (please number): _____

_____

_____

_____

_____

_____

_____ _____
Homeowner Signature Date (Month, Day, Year)

All of the above items have been satisfactorily completed.

_____ _____
Homeowner Signature Date (Month, Day, Year)

Maronda Homes, Inc. of Pennsylvania By: _____ Date: _____

Supervisor - White / Title Co. - Yellow / Buyer - Pink

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Maronda Homes, Pittsburgh, PA

ADDENDUM TO PRESETTLEMENT INSPECTION REPORT

Name _____ Phone No. _____ Date _____

Lot/Block _____ Plan _____ Street Address _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____ _____

Homeowner Signature Date (Month, Day, Year)

ALL OF THE ABOVE ITEMS HAVE BEEN SATISFACTORILY COMPLETED.

_____ _____

Homeowner Signature Date (Month, Day, Year)

Maronda Homes, Inc. of Pennsylvannia By: _____ Date: _____

THE FOLLOWING WORK WILL BE COMPLETED WHEN WEATHER PERMITS:

_____

_____

_____

_____

_____

_____

_____

All of the above exterior work has been completed satisfactorily.

_____ _____

Homeowner Signature Date (Month, Day, Year)

Maronda Homes, Inc. of Pennsylvannia By: _____ Date: _____

Supervisor - White / Title Co. - Yellow / Buyer - Pink

SERVICE REQUESTS

Four Ways to Submit Your Service Requests!

PLEASE DO NOT CONTACT YOUR CONSTRUCTION SUPERVISOR OR SALES-PERSON FOR SERVICE REQUESTS IN ORDER THAT YOUR REQUEST MAY BE DOCUMENTED!

1 **Fill out the Service Request form in the Homeowner's Guide.**

2 **Customer Care Warranty Calls**
MONDAY - FRIDAY 8:00 a.m. - 5:00 p.m.

724-695-1200 ext. 147

3 **Online at:**

service@maronda.com
or fax: 724-695-4364

4 **EMERGENCY SERVICE REQUEST**
(Evenings after 5:00 p.m. or Weekends)

- **Plumbing Emergency**
  (sewer & broken water lines)
  412-906-6468 (Bob Pardini)

- **Heating Emergency**
  (loss of cooling does not consititute an emergency)
  412-787-1341 (Wade Heating)

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SERVICE REQUEST FORM

Homeowner: _____ Closed: _____

Job Number: _____ Subdivision: _____

Address: _____

Telephone: Home _____ Work _____

I feel the following items require attention or service by a Maronda Homes Representative.

1. _____

2. _____

3. _____

4. _____

Date of Request: _____

To Homeowner:

Sign below only when items requested are qualified by a Maronda Homes Representative as serviceable warranty items and completed.

_____

The above items have been reviewed and corrections/work satisfactorily completed.

Signed: _____ Date: _____

Maronda Homes Representative _____

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SERVICE AND REPAIR WARRANTY

TO: NEW MARONDA HOMEOWNERS
FROM: MARONDA SYSTEMS;
PLUMBING, ELECTRICAL, AND HEAT & AIR CONDITIONING DEPARTMENTS

YOUR NEW HOME IS COVERED BY A LIMITED ONE YEAR WARRANTY, AND THE ITEMS THAT ARE COVERED ARE LISTED IN YOUR NEW HOME BUYERS MANUAL. FOR ITEMS THAT MAY REQUIRE SERVICE OR REPAIR OUTSIDE OF YOUR ONE YEAR WARRANTY, THE FOLLOWING IS WHAT WE RECOMMEND FOR YOU TO DO.

PLUMBING REQUIREMENTS:

The Plumbing Department recommends that if needed a licensed plumbing contractor services your home after your one year warranty expires. Please refer to the yellow pages in your particular area of the state.

Before calling a Plumber, you should try to solve the problem yourself. There are also some simple questions to ask.

1. No hot water, check the circuit breaker.
2. Cost to evaluate the problem.
3. Guarantee on repairs made.

ELECTRICAL REQUIREMENTS:

The Electrical Department recommends that if needed a licensed electrical contractor services your home after your one year warranty expires. Please refer to the yellow pages in your area for a licensed electrical contractor.

Before calling an electrician, you should try to solve the problem yourself.

1. Check if breakers are tripped.
2. Check if GFCI outlets are tripped. (There are several throughout your home, including garage.)
3. Replace light bulbs.
4. Replace batteries in smoke detectors if they beep.

IF YOU CANNOT FIX THE PROBLEM, CALL A LICENSED ELECTRICAL CONTRACTOR FOR HELP.

HEATING & AIR CONDITIONING:

The HVAC Department recommends that if needed a licensed air-conditioning contractor services your home after your one year warranty expires. Please inform them you have a 5-Year **Parts** Only Warranty from the date of closing.

Before calling an HVAC contractor, you should try to solve the problem yourself:

1. Ensure battery is working in the thermostat.
2. Check if breakers are tripped to the unit.
3. Ensure the outside disconnect by the condenser is in the ON position.
4. Ensure the air filter(s) are clean.

ALWAYS ASK THE FOLLOWING QUESTIONS WHEN YOU CONTACT AN AIR-CONDITIONING CONTRACTOR.

1. Do they service your brand of A/C unit?
2. Cost to evaluate the problem.
3. Guarantee on repairs made.

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IMPORTANT INFORMATION REGARDING PLUMBING, HVAC and ELECTRICAL SYSTEMS

Dear Homeowner:

Thank you for allowing Maronda Homes the privilege of serving you. We have used only the best materials in all of our **PLUMBING SYSTEMS** and our staff is on call to serve you!

If, during the initial occupancy of your new Maronda home, you should encounter a problem or have a question, please call ***Maronda Service Department at 724-695-1200 (ext. 147)*** and we will schedule an appointment. Service Calls will be scheduled during regular business hours on Monday thru Friday. However, if an emergency arises (as outlined below), we will endeavor to correct the problem as quickly as possible. **Our After Hours Emergency Phone Number is 412-906-6468.** The following are some of the types of problems that may occur.

Problem to be Scheduled During Regular Business Hours:

- Drips or leaks under sinks, lavatories, etc.
- Stopped up toilet, lavatory, tub, etc.
- Lack of Hot Water, please check breakers.
- Disposal blockages, dishwasher blockages.
- Water hammer in pipes.

Emergencies Include:

- Broken water lines or major leaks.
- Entire plumbing system stoppage; after 30 days this is the Homeowners responsibility.
- Water main at meter broken.
- Sewer line breakage.
- Gas leaks. Notify gas company ASAP. Do not turn on/off any electrical switches/appliances and leave your home immediately until gas company arrives. After gas company identifies source of leak, call Maronda's After Hours Emergency Number

We expect our product serves you well and look forward to your continued satisfaction.

Best regards from the
Plumbing Department

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Dear Homeowner:

Thank you for allowing Maronda Homes the privilege of serving you. We have used only the best materials in all of our **ELECTRICAL SYSTEMS** and our staff is on call to serve you!

If, during the initial occupancy of your new Maronda home, you should encounter a problem or have a question, please call ***Maronda Service Department at 724-695-1200 (ext. 147)*** and we will schedule an appointment. Service Calls will be scheduled during regular business hours on Monday thru Friday. The following are some of the types of problems that may occur.

Problem to be Scheduled During Regular Business Hours:

- Switched outlets or bath fans not working (check GFI Reset Button and Breakers)
- Light fixture not working (is bulb burned out? or is wall switch on?).
- Smoke Detectors going off intermittently (check batteries).
- Doorbell not working correctly.
- Phones are not working.
- Partial power.

- Complete power outage. Call your applicable power company

We expect our product serves you well and look forward to your continued satisfaction.

Best regards from the
Electrical Department

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Dear Homeowner:

If you have any further questions or problems regarding your **HEATING OR AIR CONDITIONING SYSTEM**, please call ***Maronda Service Department at 724-695-1200 (ext. 147)***. Service calls will be scheduled during regular business hours 8:00 am to 5:00 pm, Monday thru Friday. However, if an emergency arises (as outlined below) we will endeavor to correct the problem as quickly as possible. **Our after hours emergency number is 412-787-1341 (Wade Heating).** The following are some types of problems that may occur:

TO BE SCHEDULED DURING REGULAR BUSINESS HOURS:

- Condensation drain leaks.
- A/C system does not heat or cool sufficiently.
- All air distribution problems, i.e., one room too warm etc.
- Thermostat problems.

EMERGENCIES INCLUDE:

- Gas system does not heat at all; remember to check your circuit breakers before calling.

Please remember that warranty covers only defects in materials and workmanship. Tripped breakers, dirty filters or failures resulting from outside influences are not considered warranty problems. There will be a service charge to handle these types of calls.

Best regards from the
HVAC Department

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NAME: _____ LOT/BLOCK: _____

ADDRESS: _____ COMMUNITY: _____

Dear Maronda Homeowner:

Listed below are some of the entities you should contact regarding your new home. Also, following is various information regarding the care of your new home.

Please Be Sure You Have Contacted:

1. The appropriate **Utility/Power Company** and made arrangements for new service and payment of any required deposits. Maronda Homes does not have the utilities turned on in your name. You must contact your utility/power company **prior to your closing** in order to have all services (electric, gas, phone) at your new home.

2. The appropriate **Water/Sewer Entity** and make arrangements for new service and payment of any required deposits. Maronda Homes will only pay for water and/or sewer usage until your day of closing. **Water service will be disconnected 48 hours after closing unless** you notify that entity to transfer service into your name effective the day of closing. **You must notify the appropriate water/sewer company prior to your closing date to avoid interruption of service and/or a re-connection fee.**

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BUYER / RENTER SERVICE POLICY

An increasing number of Maronda Homes buyers are electing to place their home on the Rental Market. While Maronda Homes recognizes the financial wisdom of such a decision, our organization is not prepared to become a part of the "rental industry". To avoid confusion regarding the responsibilities of Maronda Homes and the responsibilities of the Buyer/Landlord, Maronda Homes has adopted the following **Service Policy regarding "Renters".** This policy outlines quite clearly the item Maronda Homes considers to be a part of its obligation as the Builder and those items which are the responsibility of the Buyer/Landlord and the Tenant.

Structural Elements

Maronda Homes will warrant "Structural Components" of the home where Renters are present. The term "Structural Components" is understood to include the following: Roof Leaks, Window Leaks and Excessive Foundation and/or Wall Cracking. **Maronda Homes will not warrant Repair Work** to the "finished components" that are a result of carelessness on the Renters part. Such non-warranty work include interior caulking, painting, repair to flooring, scratched mirrors, drywall repairs, countertop and cabinet repairs, screen tears, damaged doors, landscape or sod replacement.

Plumbing

Maronda Homes is responsible only for plumbing stoppages that are a result of construction debris. The Homeowner/Renter is responsible for all other items found in the sewage lines. These items include feminine "hygiene" products, disposable baby items, i.e., diapers, and other objects not associated with construction debris. Unless the Plumber states in writing that construction material was responsible for the plumbing problems, Maronda Homes will not be responsible for payment to the plumbing contractor. The Homeowner/Renter will be responsible for payment to the plumber at the time of the visit. In addition, Maronda Homes will not accept plumbing invoices nor will it grant authorization for plumbing repairs to any outside plumbing contractor, i.e., Roto-Rooter, etc.

Maronda Homes will not have a Six Month Service Inspection with the Renter of the home. Should the Buyer elect to have the Six Month Inspection, he/she must arrange with Maronda Homes Customer Service to be present for the inspection.

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LANDSCAPING / GRADING INFORMATION

If landscaping was included when you purchased your home, we will install your landscaping under the prescribed accepted practices of the area, but we cannot be held responsible for adverse weather conditions after you take possession.

Shrubbery - Weather, soil, climate and other local conditions greatly affect shrubbery when included with your new Maronda home. Maronda Homes, Inc. does not offer any guarantee on shrubbery.

Starter Lawn Seeding - This service consists of seeding & light topical mulching. It will not germinate into a starter lawn without daily homeowner watering. In order to develop it into a good lawn, water - fertilizer - overseeding - water - fertilizer and more water has to be applied. Do not let new grass grow too long before cutting. Grass can be cut short in cool weather, but in hot summer months, growth should be cut to only 3 inch minimum.

If a starter lawn seeding is a part of your new home package, it is necessary for you to fully understand the conditions under which your starter lawn seeding has been installed.

1. Topsoil and seed have been applied according to the most accepted standards and at a time when weather conditions permit. We cannot, however, be responsible for adverse weather conditions occurring after the lawn has been planted or after your taking possession (whichever comes later). In case of serious washouts by storms or excessively heavy rains, we will furnish, one time only, additional topsoil and seed, but no labor, in order that you may repair any damage.

2. Since the starter lawn seeding is necessarily applied over newly graded land, sunken spots sometimes will occur. We will also supply one time only necessary topsoil and seed, but no labor, in order that you may repair these spots should they occur.

3. Since this is a starter lawn seeding it will be necessary for you to continually water this every day preferably in the morning for the first 30 days. Fertilize, and overseed thin and bare spots in order to insure establishment and survival. Do not fertilize in hot weather and always water after you fertilize. The most important ingredient is water.

4. Topsoil may contain roots, stones and organic matter. The topsoil applied to a lot is usually the same topsoil from the plan that was stripped away and stock piled in the early phases of development. If a starter lawn seeding is to be installed, surface conditioning will be done prior to seeding. Surface conditioning will remove much (but not all) of the miscellaneous roots, stones, and other matter. Nevertheless, stones and other matter may continue to work their way to the surface over time. It is the homeowners responsibility to remove them if their appearance is objectionable. No action is taken to remove roots, stones or other material below the surface.

Grading - The grading will be accomplished to cause the water to flow away from your home. These grades are established to prevent (as much as possible) any wet basement that may arise. Changing of these grades by you would cause our one-year dry basement guarantee to become null and void.

It will be necessary for you to maintain the established grades and to keep the swales open so that they will serve their purpose. If water is allowed to stand in your yard, especially near to the house, it may force its way through waterproofing and masonry walls into your basement. Thus, you may have to fill some sunken places next to the house in order to maintain the proper grade, in addition to keeping the swales operational. If applicable, please insure that brick weepholes are not covered by any regrading, fill dirt, or mulch.

As stated in the specifications of your home, we will rough grade and seed the area affected by construction. This means 50 ft. behind the house or to the top of the slope, to whichever comes first on low side lots, and 50 ft. behind the house or to the toe of the slope, whichever comes first on high side lots. If your lot presently has trees on it, we will reserve the right to remove or leave them at our discretion. It is our intention to remove only those trees that are necessary to properly grade the lot and install the driveway, and necessary utility lines.

Many considerations are involved in the grading of a community. Although alterations are generally not recommended, if any changes are made, they should be done under the guidance of an appropriate qualified professional. Improper changes could result in a destabilized hill side and contribute to a slope slump on either a high side or a low side slope. It is also advisable not to dispose of any debris over a low side slope or redirect the water flow. Loose debris of any type (including dirt and landscaping refuse) can cause slope saturation and contribute to slump conditions. Maronda Homes will not be responsible if you change the conditions of your lot.

Areas not graded during the home construction will be left in their existing state. In some cases this will include undergrowth or deadwood which will not be removed. In situations where the existing topography includes a spring or some surface runoff outside of the area graded during home construction it is not our intention to disturb these areas or install additional drainage systems.

Standing or ponding water shall not remain for extended periods in the immediate area of the house after a rain (generally no more than 24 hours), except in swales that drain other areas or in areas where sump pumps discharge. In these areas a longer period can be anticipated (generally no more than 48 hours). The possibility of standing water after an unusually heavy rainfall should be anticipated by the owner. No grading determination shall be made while frost or snow is on the ground or while the ground is saturated. “Seasonal springs” within graded areas occurring after the closing will not be addressed as a warrantable item unless it affects the foundatiion as it relates to the “Maronda Service Policy under Block Foundations.”

Topsoil - Any and all topsoil scraped off and piled on any lot in any subdivision, belongs to Maronda Homes, Inc. and will be used as Maronda Homes, Inc., desires. It is agreed the topsoil will be removed off any lot, unless otherwise agreed upon, prior to customer taking possession of the property. In no instance does the customer have any right or interest in the topsoil on their lot within the area affected by construction. Topsoil does not include manure, which we will not supply. Topsoil or fill will be delivered at curb side.

Maronda Service Policy - After the initial installation of your starter lawn seeding, it is not our policy to service your landscaping. In case of serious washouts or sunken spots caused by storms or excessively heavy rains, we will normally furnish - on a onetime basis at the curb side - additional fill (not screened topsoil) and seed, but no labor, in order that you may repair any damage. There may be locations where we will not assume responsibility for storm damage. This point should be checked with your Maronda supervisor. On a onetime basis with the first year we will provide a small amount of topsoil (not screened) (at curb side) to enable you to fill in sunken areas at the foundation or utility lines. No labor, nor seed, will be provided by Maronda Homes, Inc.

Homeowner's Maintenance Manual

Protecting Your Investment

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Imperial, PA 15126
Phone: 724-695-1200
Fax: 724-695-4364
service@maronda.com

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MHP 4-10

Maronda Homes Service Policy

Air Conditioning and Heating - Your heating and air conditioning parts and labor are warranted for one year; however, there's a limited five year parts only warranty. Problems should be referred directly to the heating and air conditioning company. If an A/C service man is called and only resets a circuit breaker to remedy a problem, you will be charged for a service call. NOTE: A temperature differential from five to seven degrees (actual room temperature versus thermostat reading) constitutes an acceptable system. Heating and Air Conditioning warranty work will be performed on Monday through Friday, 8 A.M. to 5 P.M. only, except for an emergency which is defined later.

Asphalt Drives & Concrete Aprons - It is the policy of Maronda Homes not to replace or repair concrete with cracks or scaling caused by extreme weather conditions, or by freezing and thawing cycles. We recommend the application of a concrete sealant to help retard the deterioration of the concrete surface. On asphalt drives, we will patch fill sunken spots 2 inches or more deep on a onetime basis during the first year of ownership. Under no circumstances will we resurface the entire driveway because of sunken spots. Be sure that you do not drive or park heavy vehicles on your asphalt driveway until it has cured (approximately 30 days). We cannot be responsible for asphalt areas damaged by gasoline, oil, or as a result of holes or gouges caused by sharp objects such as outdoor furniture legs and bicycle kickstands, etc., or by vehicles parked over long periods of time. Automobile power steering can also cause holes or gouges, if the car is steered while standing still during hot weather. Be careful of this. We suggest that you apply a driveway sealer after patching is finished to help improve the durability and appearance and reseal every 3 years. Spots of oil, gasoline or similar substance should be washed off the asphalt with sudsy water and rinsed. Where sewer and grating appear in driveways, the homeowner is responsible for keeping lines clear. If a utility company, the developer of the plan, etc., digs a ditch across your lot or driveway in order to put in a utility line, Maronda Homes Inc. is not responsible for repairing this damage.

Appliances - In our arrangement with the appliance dealer, we have provided a service telephone number for you to call immediately should service be needed. This number is among the documents given to you during the pre-settlement inspection. Unless otherwise stated, your appliances are fully warranted for one year from settlement date. Please inspect appliance surfaces at your "Presettlement Inspection" because they will not be replaced/repaired at a later date due to a chip, dent, etc.

Block Foundations - In order to improve the appearance of any larger cracks in block walls or foundations (over 1/8 inch) that may appear within your first year in the home, it is the policy of Maronda Homes to touch them up with cement. Extremely large cracks, caused by structural settlement, will be repaired in a manner recommended by accepted standards. Please note such conditions at the time of the six month final inspection.

Because masonry basement walls are not waterproof in themselves, we have taken several steps to prevent the entrance of water into your basement. We have waterproofed the outside of the foundation below grade with a high quality waterproofing material. In most locations we have also installed exterior french drains in addition to interior perimeter drainage (to vessel any water that may penetrate). And finally, we have established a grade around the outside of your house to carry the water away from the house. (See "Landscape.")

We suggest that you avoid planting shrubbery too close to the foundation. Three feet is a good minimum. Never water toward the foundation. Soil should be packed and banked so that water will drain away from the house. Also see Basement Care. An attempt should be made by the customer to divert water from running toward the house. We suggest that you pay particular attention to this problem if your home was built during the fall or winter, because the ground does not have a chance to settle until the spring thaw. This could direct excessive runoff toward the foundation unless corrective action is taken.

Often times condensation will collect upon the block walls giving a "wet basement" appearance which may appear as a white water stain (efflorescence) or a damp appearance. This may occur first in a corner where

there is less air movement. This is very common and can be relieved by using exhaust fans, opening windows, etc., but a dehumidifier works very well. Try one upon seeing damp block before calling our service department. In most cases the damp block will dry out. (See section on Condensation).

Maronda Service Policy – During the first year of occupancy, Maronda Homes will take whatever action is necessary to prevent a wet basement, defined as follows: A wet basement does not include moisture caused by condensation or wet blocks caused by rains or lawn sprinklers hitting the above-grade blocks. It is the policy of Maronda Homes to supply you with necessary fill and soil for any sunken areas which occur from settling, one time upon request, delivered at curb site. We do not supply the labor to divert the water from your house. However, if you have diverted all surface water from your house and you still have the running water problem, we will check the drain system for clogging or will use any other accepted building practice designated by your supervisor to stop leakage. Maronda Homes is not responsible for damage to personal items.

Brick/Stone Veneers - Face brick and stone veneers may require "pointing" (filling on minor cracks in joints). Maronda will not repoint face brick/stone veneers. In addition, Maronda has no way of controlling the color and texture of brick and stock as it relates to samples; therefore, minor variations will be acceptable.

Cabinets - Cabinets are warranted against defects for one year. Chips, scratches and/or swollen counters or splashes are not warranted after the pre-settlement inspection. Because of the natural characteristics of wood, variations in color consistency is natural and acceptable.

Doors - It is the policy of Maronda Homes to adjust sticking and warped doors noted at the six month final inspection. There is a gap at the bottom of all interior doors that is necessary to ensure adequate air movement between rooms when the door is closed. The height of this gap will appear more pronounced on hard surface flooring. Maronda Homes will not adjust the doors to minimize the gap distance.

Electrical System - The wiring in your home meets local code requirements and safety standards which will accommodate a certain number of electrical appliances. Occasionally you may find an outlet or circuit that does not operate when you first move into the home. If, after checking all circuit breakers including the GFCI outlets, the outlet still does not work, a call to our electrician will insure prompt action. Do not plug appliances into GFCI outlets; they are extremely sensitive and will trip due to the supply load needed to operate the appliance.

Your electrical wiring and appliances are protected by circuit breakers located in the main panel box; eliminating the problem of replacing fuses to reset a tripped breaker. Simply follow instructions which are usually found on the panel.

Ordinarily, small appliances may be added without fear of overloading a circuit. However, larger appliances or too many small appliances may cause tripping of the circuit. Other causes of circuit tripping are 1.) Worn out cords or defective plug connections, 2.) Defects within the appliances themselves, and 3.) Starting an electric motor. (Motors require more current to start than they use when running.) Also keep in mind that light fixtures in a Maronda home call for a 60-watt bulb maximum. Especially with recessed lighting fixtures, higher wattages can be a fire hazard. Be sure that all attic insulation is kept away from flue vents, lighting fixtures, and circuit boxes.

If after resetting the circuit breaker it again becomes tripped, you should immediately attempt to locate the cause and correct it. If you cannot locate the cause yourself, call our service department.

Maronda Service Policy - Your electrical system is guaranteed for one full year, with the exception of fixtures. The same policy will apply to electrical fixtures as plumbing fixtures. We will repair or replace fixtures only if such needs have been noted on the presettlement

sheet. If you use a GFCI against recommendations, Maronda Homes will not be responsible for any losses.

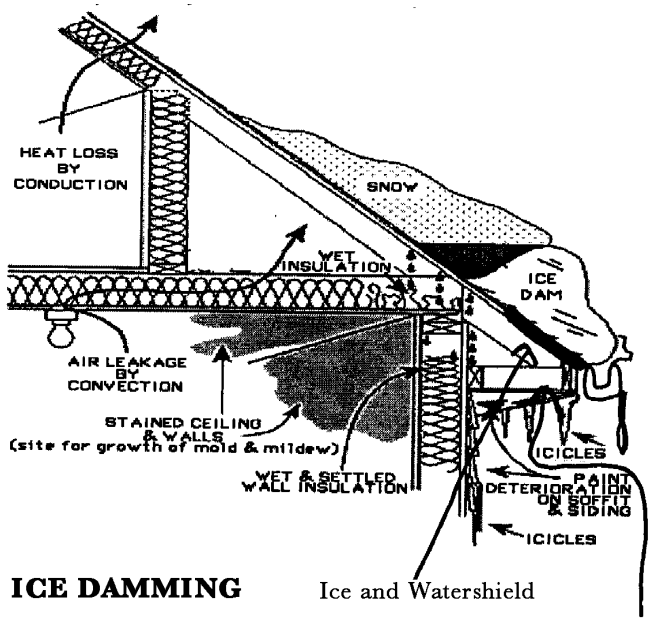
Flooring - Questions on problems experienced with your carpeting should be directed to our service manager before or at the time of the six months final inspection. He may be familiar with the carpeting manufacturer's policies and warranties and can initiate contact with the manufacturer for you. Carpet seams will show, however no visible gap is acceptable. We will repair visible gaps only. The entire installation is warranted for 1 year if a restretch is needed we will restretch and resecure 1 time during the first year. Maronda Homes does not provide a warranty against floor squeaks or service for floor squeaks after closing. If you request that any carpet be lifted at a seam, the seam may be more pronounced after reseaming due to glue build up. You should expect that a seam will be more visible if you request that carpet be lifted or opened. Maronda will not replace carpeting due to stains, spotting, discoloration or shedding. Carpet replacement will only be considered if the manufacturer or an independent testing laboratory determines the carpet itself is defective.

Please familiarize yourself with the manufacturers hardwood floor care and product warranty guide. The manufacturer recommends specific precautions to protect the floor from damage due to water, some types of footwear, floor mats, furniture, etc. If hardwood flooring is used as a flooring material in your home some minor separation may occur due to weather changes and some fading or irregularities will occur due to exposure to sunlight. Hardwood surfaces can be scratched so any and all precautions should be taken to prevent this. In the event a repair or replacement is needed we will only patch the area and note there will be a color difference in the materials being used due to dye lots, woods, graining. We will match as closely as possible.

Gutters / Downspouts - Gutters and downspouts are warranted for 6 months and if the gutters develop leaks, we will repair these one time at our six month final inspection.

Ice Damming - Occasionally, we have had extreme winter weather conditions throughout the Pittsburgh area. The snow, ice and freeze/thaw cycles can potentially damage new and old residential and commercial structures alike. As a result, ice damming can potentially occur, causing leaks damaging rooms inside the house.

Ice damming (see picture below) happens if the accumulation of snow is left on a roof too long and the temperature stays very cold and the snow is melted from underneath (the attic) and from the sun. It then refreezes as it goes to the lower area of the roof at the soffit. When enough ice has formed at the soffit it begins to dam the water from going off the roof, causing it to back-up under the roof shingles allowing the water to enter your home. There are measures that are taken to minimize the effects of ice damming (such as ice and watershield) but the **only way to ensure there are no problems is to not allow a snow build-up on the roof, particularly at the eaves which is a homeowner maintenance responsibility.** Ice damming can also be minimized if your gutters are free of leaves and debris.



ICE DAMMING Ice and Watershield

If you are having a leak, call customer service at 724-695-1200 extension 147 or email service@maronda.com and request someone to come out and assess the issue. If it is found that it is our fault, we will repair it. If it is found not to be our fault but is ice damming, then it will be the responsibility of the homeowner. With this said, if it is ice damming we would recommend that you contact your insurance agent and file a claim immediately.

Landscaping - After the initial installation of your starter lawn seeding, it is not out policy to service your landscaping. In case of serious washouts or sunken spots caused by storms or excessively heavy rains, we will normally furnish - on a onetime basis at the curb side - additional fill (not screened topsoil) and seed, but no labor, in order that you may repair any damage. There may be locations where we will not assume responsibility for storm damage. This point should be checked with your Maronda supervisor. On a onetime basis with the first year we will provide a small amount of topsoil (not screened) (at curb side) to enable you to fill in sunken areas at the foundation or utility lines. No labor, nor seed, will be provided by Maronda Homes, Inc.

Painting / Drywall - We will return once for repair of the wallboard in your home, this repair includes nail pops & settlement cracks only. Because the above problems may not occur at once, we may give you the option of waiting up to one year before repairs are made on drywall. It is suggested you delay any drywall repairs in this case until you decide to repaint or redecorate. We do request, however, that you note your desire to delay this service during the six months final inspection. If you desire to have this inspection it is the responsibility of the homeowner to call for this service. Please note that repairs do not include replacement of paint, wallpaper or other wall covering. **We will not be responsible for sanding or repainting, inside or outside the home after presettlement.**

Plumbing System - The plumbing system in your home is guaranteed for one year with respect to leaks and proper functioning. Please note this does not include washer wearing, which causes dripping leaks in your faucets. (Care should be taken to close the faucets just hard enough to shut off the flow of water.) Closing the faucets too forcefully may cut the washers.

Roofing - The roofing shingles on your new Maronda Home are warranted from leaking for one year. In case of severe damage caused by abnormal storms or high winds, we suggest that you contact your insurance agent. The shingle manufacturer has other specific warranties. (See your Shingle Warranty)

Sewer - If the drainage system becomes clogged within 30 days after closing we will assume responsibility for repairs, provided the clog is not homeowner caused. Thereafter, repairs will be the responsibility of the homeowner.

Siding (Vinyl) - The vinyl siding on your house is characterized by its low-maintenance features. All siding manufactures have their own recommended ways of caring for their siding. Aluminum/Vinyl siding will expand and contract with temperature changes, often resulting in "creaking" noises. This is normal and is nothing to worry about. Note that some waviness in siding is to be expected because of bows in studs and the underlayment material attached to the walls of your home.

Maronda Service Policy - If the siding is bowed and exceeds 1/2 inch within 32 inches we will install additional nailing and/or replace siding to meet standard industry requirements. Please note that there may be color variances to replaced areas. Siding failure (fading or peeling for example) should be reported directly to the manufacturer - in writing. We will not be responsible for damage to siding caused by high winds, severe storms or lack of maintenance.

Tub and Shower Enclosures - Be sure to inspect the tub and shower units at the pre-settlement inspection for scratches or chips. Maronda Homes will not repair scratches unless they are noted at the pre-settlement inspection.

Walks, Porches and Steps - It is the policy of Maronda Homes not to replace or repair concrete with cracks 1/8 inch or smaller (in width or depth). There are surface treatments available from building supply stores that you can apply to fill the cracks. We will replace cracked stepping stones only when reported on the Presettlement Inspection. In addition, stepping stones will not be "reset" after the "Presettlement Inspection."

HOMEOWNER'S MAINTENANCE MANUAL

maronda.com

Maronda Homes

AN EASILY OBSERVABLE BETTER VALUE!

DEAR NEW HOMEOWNER,

The Homeowner's Maintenance Manual is written in a manner that we hope will help you understand how your new home functions. It is a resource manual, which is intended for informational purposes only.

If you follow these few simple maintenance procedures, in a timely manner as described in this manual, your home will give you many years of pleasure and comfort.

The manual explains in simple and easily understood language your normal homeowner maintenance responsibilities, which should always be conducted in a prudent, cautious and safe manner.

If you feel that certain types of maintenance or repairs are beyond your particular capabilities, we suggest and urge you to call a professional, licensed contractor to perform the needed work.

We have attempted to cover all of your home's maintenance areas with as much pertinent information and their primary needs as possible. Some information may not pertain or apply to your particular home. It is impossible to address every scenario or method of maintenance. If we have omitted anything and you are unsure of how to proceed, we suggest that you refer to the manufacturers written instructions or contact a local professional contractor.

IMPORTANT NOTE REGARDING ANY AND ALL MANUFACTURED ITEMS

(eg: appliances, garage doors, windows and doors, toilets, sinks, tubs, faucets, etc.)

The suggestions and recommendations found in this manual are not intended to replace or substitute any of the manufacturer's recommendations.

If you should notice a conflict between our suggestions and those recommendations provided by the manufacturer, the manufacturer's directions and guidelines always supercede our suggestions.

WELCOME TO YOUR NEW HOME!

In order to acquaint you with the maintenance requirements and warranty information about your new home, we are providing you with this Homeowner's Maintenance Manual which consists of four chapters:

1. **Homeowner's Maintenance Checklists**
2. **General Information & Safety Tips**
3. **Homeowner's Maintenance Information**
4. **Glossary of Construction Terms**

This book will provide useful information which will assist you in the maintenance and service requirements of your new home.

The Homeowner's Maintenance Checklists provide several lists of important preventative maintenance procedures required at periodic intervals. By adhering to these checklists, you can discover and correct minor maintenance problems before they become a major expense.

The General Information & Safety Tips section contains valuable information concerning public utilities coming into your home as well as a few safety tips which you should observe when doing routine maintenance.

The Homeowner's Maintenance Information section gives you and explanation of the basic components of your home. This section will note the normal repairs that may be required and gives you helpful hints on how to care for your home.

The Glossary of Construction Terms defines for the layman descriptions and terms used in the construction industry. A few minutes spent in reviewing this section can result in your having a more comprehensive knowledge of how your home is constructed and can be of great benefit when dealing with construction tradespeople.

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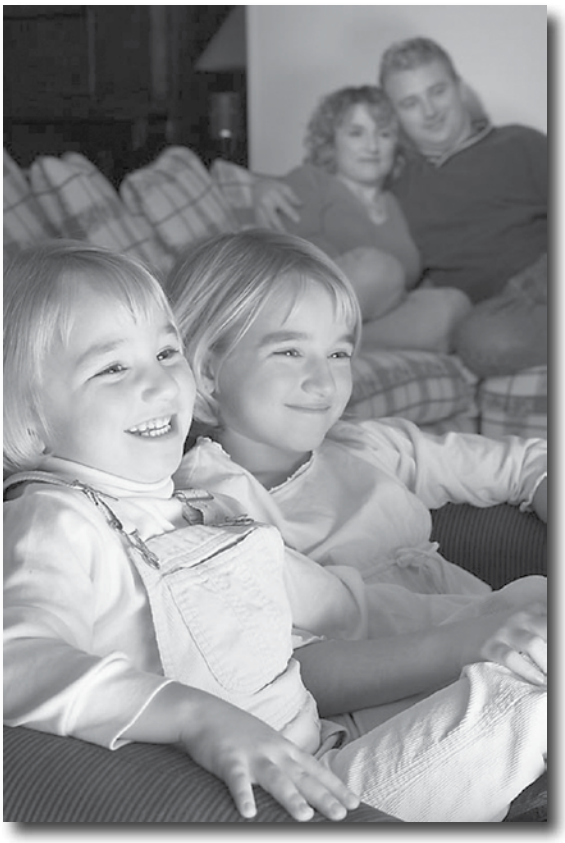
CHAPTER 1

Homeowner's Maintenance Checklist

THE HOMEOWNER'S MAINTENANCE CHECKLIST

The importance of maintaining your new home on a regular basis is comparable to maintaining a new car. If you do not change the oil and have the car tuned up, little problems can become a major expense.

Unfortunately, many homeowners spend less time and money maintaining their homes than their cars! Yet, the car will generally lose value from the date of purchase while a well maintained home will increase in value and be a source of family pride and pleasure for years to come.



Your new home was designed to meet or exceed the requirements of the local building code for your home on the date the building permit was applied for. Your home was built to last for generations, but it has numerous components and systems that require periodic maintenance. By implementing the following preventative maintenance suggestions, you can help keep your home functioning properly with minimal problems.

To help you pinpoint when specific maintenance items should be performed, this check list is divided into four time periods.

- **After Move-In**
- **Every Month**
- **Every Six Months**
- **Annually**

Additionally, you may be provided with manufacturers manuals and operating instructions for various appliances and systems in your home. The suggested maintenance procedures in these manuals should be closely adhered to.

AFTER MOVE-IN CHECK LIST

BATHROOMS & MAIN FLOORS

- ❑ Apply grout sealer to ceramic tile grout if you wish to give the grout additional protection against discoloration from spills and stains.

ELECTRIC

- ❑ Locate the main circuit breaker in the electric panel box and show family members how to turn it off in case of an emergency.

FIRE EXTINGUISHER

- ❑ Purchase a general purpose fire extinguisher for each floor of the home plus one small kitchen extinguisher in case of grease fires. Demonstrate proper usage to family members in case of an emergency.

FIRST AID KIT

- ❑ Keep first aid materials and a book on first aid procedures in an accessible location.

FLOORING

- ❑ Attach furniture protectors underneath furniture legs to protect floor finishes.

HOUSEHOLD TOOLS

- ❑ Acquire basic tools to help you with normal home maintenance chores, including: pliers, adjustable wrench, flat-blade and Phillips-head screwdrivers, claw hammer, hand saw, tape measure, caulk and caulking gun, putty knife, paint roller and brush, power drill and drill bits, assorted nails, brads, screws, nuts, bolts, sandpaper, utility knife, toilet plunger, flashlight and batteries.

LANDSCAPING

- ❑ Review and implement recommendations in the Landscaping and Grading Section of this Manual.

PLUMBING

- ❑ Locate the main water line shut-off valve and all individual plumbing fixture valves and show all family members how to close them in the case of a plumbing emergency.

THE HOMEOWNER'S MAINTENANCE CHECKLIST

AIR CONDITIONING AND HEATING

- ❑ Check air filters and clean or replace as necessary.
- ❑ Vacuum air supply and air return registers to remove dust and lint.

FIRE EXTINGUISHERS

- ❑ Check fire extinguishers to ensure that they are fully charged.

GARBAGE DISPOSAL

- ❑ Clean disposal blades by grinding up ice cubes. Freshen it with baking soda and by grinding up citrus fruit rinds.
- ❑ Test and reset Ground Fault Circuit Interrupters (GFCI) breakers.

INTERIOR CAULKING

- ❑ Check for cracks or separations in caulking around sinks, bathtubs, toilets, faucets, countertops, back splashes, ceramic tile walls, ceramic floors, window sills, and any other areas originally caulked by your builder. To repair these areas, use an appropriate caulking compound and follow the caulking instructions in the relevant sections of this manual.

RANGE HOOD FAN

- ❑ Clean or replace dirty filter.

SMOKE DETECTOR

- ❑ Test smoke detectors.
- ❑ Clean and/or vacuum.

EVERY SIX MONTHS CHECKLIST

CABINETS

- ❑ Clean and apply a light coat of wax to wood finish cabinets.

CAULKING / PAINTING

- ❑ Check all areas originally caulked by the builder, especially exterior windows and doors.
- ❑ Check exterior paint and stain surfaces (especially stained doors) and refinish as needed.

DOORS

- ❑ Check screws on door lock set and hardware and tighten as necessary.
- ❑ Lubricate bi-fold and by-pass doors as necessary.
- ❑ Clean sliding door track and apply silicone spray to tracks as necessary. Caution - only use a silicone lubricant; oil will cause the rollers to deteriorate. Take the necessary steps to protect adjacent flooring from the silicone, as it may cause discoloring. Oil moving parts of the garage doors.

ELECTRIC

- ❑ Check electrical extension and appliance cords. Replace frayed or split cords.

EXTERIOR FINISHES

- ❑ Check for cracks and voids in exterior caulking and re-caulk as necessary. Follow the maintenance instructions contained in the painting section of this manual.

ROOFING

- ❑ Visually inspect roof from the ground for broken or missing shingles and gaps in flashing.
- ❑ Check and clean gutters and downspouts.

AIR CONDITIONING SYSTEM

- ❑ Have HVAC Contractor perform seasonal maintenance check-up.
- ❑ Ensure that air supply registers are not blocked by rugs, draperies or furniture.
- ❑ Make certain the concrete pad on that the A/C unit sits on is level.
- ❑ Remove excess leaves from vents.

PLUMBING

- ❑ Check water supply lines and valves to sinks and toilets. Tighten if loose or leaking.
- ❑ Clean out faucet aerators, spray nozzles and drains.
- ❑ Check pipes and drains for water leakage.

WINDOWS

- ❑ Check sills for caulking cracks or separations and re-caulk as necessary.
- ❑ Check weather stripping around windows and repair or replace as necessary.
- ❑ Check windows for smooth opening and closing operation. Clean tracks and lubricate as necessary, using silicone spray.
- ❑ Inspect window screens and repair or replace as necessary.

SMOKE DETECTORS

- ❑ Test detector and change the battery if needed.

ANNUAL CHECKLIST

ATTIC

- ❑ Check attic vents to ensure that soffit vents are not blocked with insulation and move insulation back to its original location if there are voids on the attic floor.
- ❑ Check inside attic for signs of roof leaks. Be extremely careful not to damage or disturb electrical wiring or plumbing pipes that may be in the attic.

CABINETS

- ❑ Check drawers and hinges for proper alignment. Tighten and adjust as needed.

CAULKING

- ❑ Check all areas originally caulked, especially windows and doors and recaulk as necessary.

DOORS

- ❑ Check and repair or replace weather stripping on exterior doors as necessary.
- ❑ Check and tighten door hardware and lubricate as necessary.
- ❑ Tighten all bolts on garage door.
- ❑ Check the fit of exterior doors at their thresholds. Many thresholds are adjustable.

WINDOWS

- ❑ Check all windows for gaps in caulking on the exterior of the house.

AIR CONDITIONING SYSTEM

- ❑ Have HVAC Contractor perform annual maintenance check-up.

FIREPLACE (Vented)

- ❑ Have chimney professionally cleaned as necessary.
- ❑ Inspect chimney for nests.

PLUMBING

- ❑ Remove water heater residue following instructions in the Plumbing Fixtures Section of this Manual.

PRESSURE CLEANING

- ❑ Clean asphalt shingles (where applicable) of mildew and dirt as necessary.
- ❑ Clean driveways and walks as necessary.

SEASONAL CHECKLIST

- ❑ Follow all instructions for safe operation of any fireplace.
- ❑ Brush snow off gutters and away from downspouts. Ensure any debris in gutters/downspouts is removed.
- ❑ Remove ice and snow from concrete surfaces. Avoid using de-icing agents with damaging salts.
- ❑ Decorate safely for the holidays. Do not overload circuits or use worn extension cords.
- ❑ On pleasant days, open windows to allow house to breathe.
- ❑ Hose bibs shut off prior to first freeze.

A SPECIAL CHECKLIST FOR CONDENSATION, MOLD & MILDEW

Interior Mold in Residential Buildings

Mold and mildew in residential homes is not new and most probably the very first new home had it's share of such problems. Some new homes, based on climatic conditions and living conditions, have had similar problems ever since.

Mold grows on damp or wet surfaces. Left untreated, mold spores can become airborne. Spores are like seed when they settle on vulnerable surfaces. Mold spores they can consume organic material since they are a part of our ecological system that helps to recycle organic material. Based on the foregoing, moisture is the problem. So, the new home buyer needs to be aware that early detection of moisture is essential to the resolution of the problem. Musty air in the home is a warning sign. In this age of mechanical wonders, most new homes provide some form of air conditioning. Home owners need to be aware that, under the right conditions, some condensing water could appear on walls, windows or the air conditioning vents. In such cases, one must clean and dry these areas and increase the ventilation in the home. Obtain a dehumidifier for any area with continual dampness such as a basement that is not air-conditioned.

Mold can be prevented in areas where water has been spilled or if a leak occurs. In such cases, water could get behind the wall and mold growth could occur. Look for discolored areas (usually black) or mold on surfaces. Such areas can also be caused by problems such as leaky pipes under sinks, windows left open for rain to come in. water leakage through uncaulked windows, leaky roofs, etc.

Proper maintenance of your home will go a long way toward eliminating or keeping moisture and humidity to a minimum. Use of some or all of the items below will help to eliminate major problems with mold.

- Have your air conditioning system serviced by a recognized professional company at least annually. Ask for advice from an air conditioning specialist if you are unsure about proper usage of your air conditioner.
- When outside weather is warm with low humidity, open windows to allow air circulation through the house. Also keep window coverings partially opened to allow for air circulation.
- Increase circulation of heated air.
- Run the air conditioner during humid months of the year.
- Obtain a dehumidifier for any damp areas of the home. Some examples are steamy bathrooms or basements.
- Repair any water leaks quickly.

Take measures to keep water away from the foundation. There are many other ways to care for particular situations but the best of all is to use common sense. The objective is to keep your home dry and free from leaks or water intrusion and excessive condensation.

CHAPTER 2

General Information & Safety Tips

GENERAL INFORMATION & SAFETY TIPS

Introduction

Every aspect of building your home, from laying the foundation to the final coat of paint is an art form and was done by a qualified professional selected by Maronda Homes. By following the tips in this Homeowner's Maintenance Manual you can prevent minor problems from developing into major ones. Your home will retain its value and you can experience the pride of ownership for years to come. This manual is not intended to be a "Do-It-Yourself" step by step guide, but it does provide useful information about the care and maintenance of your home. Please bear in mind that any repairs or improvements made by the homeowner or someone hired by the homeowner may void the manufacturer's or builder's warranty on the item being repaired.

While it is important to know what you are doing before you attempt any repair, it is equally important to know when to stop. If the project is more complex than you originally thought, and exceeds your ability to make the repair . . . STOP . . . call in someone who knows what they are doing. It is better to admit a lack of knowledge than to compound the problem and create a major expense.

Your local Home Improvement Center or Hardware Store can provide you with a variety of services beyond selling you merchandise. They usually have "Do-It-Yourself" books that provide detailed information about specific areas of the home. Many of them offer classes on a wide range of subjects from carpet and tile installation to selecting the proper tools for any given job. Frequently the person waiting on you can provide useful information that will help you in selecting the right materials for the project.

PERSONAL SAFETY

Accidents happen. They are called accidents because they were never intended to happen. They frequently occur because of the lack of precaution by the injured party. If hindsight was foresight, very few homeowner's would be found in hospital emergency rooms.

A few dollars invested in eye protection, proper shoes and gloves may prevent a serious injury. When working around fiberglass insulation (such as attic crawl spaces) always wear long sleeves and gloves. You should take a shower as soon as possible after finishing the project.

Every home should have one or more ladders. In selecting a ladder, make sure that it meets your needs for reach and weight requirements. When working on or around electrical fixtures never use an aluminum ladder. A ladder made of fiberglass is recommended for most applications. Pay close attention to the warning labels affixed to the ladder. They are there for your protection.

It is important to understand the function of any tool that you are using, especially power tools. Read all accompanying instructions carefully before attempting to use the tool.

Keep a first aid kit on hand at all times. Remember, the trauma of a trip to the emergency room may be avoided if you use a little common sense when working in or around your home.

UTILITY LINES, CABLES & PIPES

Introduction
Your local utility companies provide a variety of services to your home. In most cases, even though their lines cross your property, you have no ownership or control over them until they pass through a metering device (electricity, water & gas). In the case of telephone lines and coaxial television cables they must pass through an exterior wall. Service or alterations to any utility line should only be done by a competent, licensed professional. **Please remember to call PA One Call prior to <u>any</u> underground excavation.**

The illustration on the next page will provide a basic idea of where to look for various utility lines.

EMERGENCY SHUT OFFS
Your builder will show you where the main shut off valves and switches are located in your home. Every competent person living in your home should know where these switches and valves are located and how to turn them off in an emergency.

ELECTRICITY
Electricity does not discriminate against any gender, age or race. It is an equal opportunity killer. Never attempt any electrical repair unless you absolutely know what you are doing. For any additional service needs or major repairs you should call a licensed electrical contractor.

Even when attempting a minor repair you must have the electricity turned off to the device you are working on. This must be done at the Circuit Breaker Box. Turning off a wall or lamp switch will not always prevent a shock.

Every receptacle, lamp and electrical device is controlled by a circuit breaker in the main circuit breaker box. Every circuit breaker in the box should be labeled and you should know its function if you attempt to turn off the electricity. Never try to defeat the purpose of a circuit breaker. If it frequently "Trips" this is generally a sign of a more severe problem and a competent, licensed electrician should be called. The following simple steps may prevent a severe electrical shock.

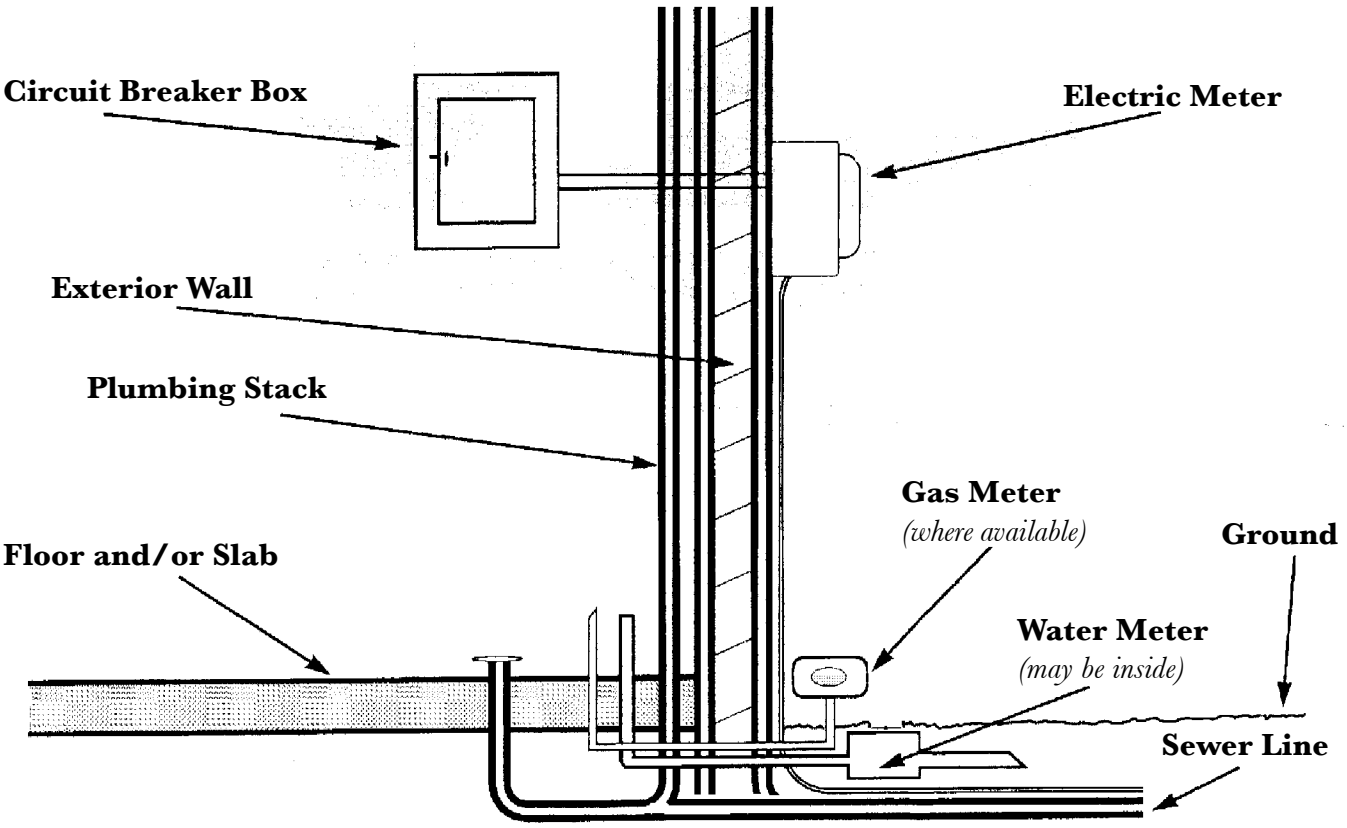
A. Open the circuit breaker box and locate the proper circuit breaker. Turn it off.

B. Close the panel door and tape a note across the front of the box, informing others that you have turned off a circuit breaker and not to touch anything. If you can lock the panel, do so.

DO NOT ATTEMPT ANY ELECTRICAL REPAIR UNLESS YOU ARE LICENSED AND QUALIFIED!

UTILITY LINES, CABLES & PIPES

NOTE: Entrance of telephone and coaxial television cables may be at the point most convenient to the utility company.



CHAPTER 3

Homeowner's Maintenance Information

AIR CONDITIONING & HEATING

A. Air Conditioner & Heating Equipment

The air conditioning and heating equipment was installed by the HVAC (Heating, Ventilating and Air Conditioning) Contractor.

The air conditioning and heating system(s) provide(s) year-round climate control and consists of a thermostat to control temperature, an air handler unit to heat or cool the air, a filter to remove particles from the air, plus a fan unit to distribute and circulate air throughout the house via ducts and registers. Air conditioners have an outdoor condensing unit or compressor which must be kept sufficiently free of obstructions (such as shrubbery) to allow air to flow freely.

Note: *Window coverings should be installed to maintain consistent room temperatures. Direct sunlight entering the house will increase the temperature in the affected area and will also fade furnishings and carpet.*

The furnace burner will automatically turn on if the room temperature drops below the thermostat setting. A point to remember is that, contrary to common belief, setting heating controls high does not make the furnace heat faster. Keeping the thermostat at an even temperature (we recommend 68 to 70 degrees) will result in more efficient and economical heating. Regarding your AC, when starting the system it will take one degree per hour to cool your home to make a maximum of 20 degree difference from outside temperature to the inside.

Homeowner's Maintenance Guidelines

Service Contract: When there is heavy demand on your HVAC system, we encourage homeowners to take advantage of the extended annual service contract that is available from Wade Heating and Air Conditioning. This contract typically provides seasonal check-ups of the heating and cooling components, plus periodic cleaning; the advantage being that scheduled service may reduce system failure by preventing problems before they occur.

Before calling for Service:

1. Check to see that the thermostat is properly set and batteries are charged.
2. Check the circuit breaker in the panel box. If tripped, reset by switching the breaker to full "OFF", then fully back to the "ON" position. If the circuit breaker will not reset, contact the HVAC Contractor. (See Circuit Breakers in the Electrical System Section).
3. Check the electrical disconnect switch, located on or near the air handler, and reset.
4. Check the exterior disconnect switch located outside the home, near the compressor and reset.

B. Air Filter

The air filter, located adjacent to the air handler unit or in the return air grille, helps reduce the flow of dust into the air. As the filter collects dust, it reduces the system's efficiency and must be either cleaned or replaced. Your Builder has installed one air filter in each filter location and will, at the walkthrough, demonstrate proper filter installation, cleaning and replacement procedures. After that, the regular cleaning, replacement and maintenance of air filters is the homeowner's responsibility.

Homeowner's Maintenance Guidelines

Monthly filter cleaning or replacement will provide cleaner air, improve air flow, and help reduce utilities costs. To remove, clean or replace filters, turn the air conditioner/furnace and fan off using the thermostat control, then carefully remove the old filter and clean, or insert a new one. Replacement filters are available through hardware and home supply stores. Make sure to buy the correct size for replacement.

C. Thermostat

The thermostat controls the entire heating and cooling system. The thermostat provides a fan switch to circulate the air when neither heating or cooling is needed.

To maximize energy efficiency and minimize utility bills, set the thermostat to a comfortable level normally between 68°F to 71°F for heating, and between 76°F to 78°F for cooling, and leave it there. Then set the fan switch to either the "ON" or "AUTO" position.

The less you change the thermostat setting, the more comfortable you will be, the lower your utility bills will be, and less wear and tear on the system's compressor will incur. Changing settings frequently and turning the system on or off expends extra energy to bring the temperature back to a comfortable level. Setting air conditioning controls too low does not cool the home faster and the same principle applies to heating.

D. Air Distribution System

Duct Work: Ducts carry and distribute heated or cooled air to each room.

Registers: Two kinds of registers are used: air supply registers, located on the floor, wall or ceiling, that deliver warm or cooled air into the room; and air return registers (located on walls or ceilings) that return air from the room back into the air handler fan to be re-heated or re-cooled.

To regulate temperatures or control air flow on different floors or rooms during different seasons, adjust the air supply registers by partially opening or closing them, thus restricting or moving additional air into each room.

Vacuum supply and return registers to ensure they remain dust free. Check that registers are not blocked by draperies, furniture or other obstructions that restrict normal air flow.

Interior doors in each room are undercut to allow return air to circulate throughout each room where the doors are closed. Do not close doors to regulate room temperatures.

A Note of Caution: *Burning candles for prolonged periods of time or burning a ventless fireplace as a single source of heat may, in some instances, create a phenomenon known as "Ghosting." This occurs when soot or dust from a burning candle is released into the air, carried throughout the house through the air conditioner, and expelled*

through the vents. The soot or dust adheres to all surfaces including ceilings, fabrics and counter tops. It is especially visible on the carpet at the base of bedroom doors. Cleaning is very difficult and is a homeowner's responsibility.

To avoid "ghosting" in your home, follow these few simple steps.

1. Buy candles made with hard wax and with thin braided wicks that curl over when burned.
2. Buy candles with low aromatic properties and with wicks that burn with a low flame.
3. Buy candles with cotton or paper wicks and refrain from buying candles with metal-core wicks.
4. Do not allow candles to smoke and keep them out of drafts.
5. Keep matches and wick debris out of the candle.
6. Extinguish candles after one hour of continuous burning. Allow the candle to cool before relighting.
7. Large numbers of candles should be burned in the fireplace with the damper open to allow the smoke and emission to escape.
8. Stop using candles that leave a visible soot ring on their containers.
9. Do not use a ventless fireplace as a single source of heat for an extended period of time.

E. Exterior Compressor / Condensing Unit

Homeowner's Maintenance Guidelines

Keep the condensing unit (compressor) level and keep the area surrounding the unit clear to allow unimpaired air flow. Do not plant bushes too close to the unit and be careful that dirt, leaves, and grass clippings are cleared away. For a thorough cleaning, contact an HVAC Contractor. Do not build a deck around or over the compressor unless there is an 18 inch clearance on the sides and a 6 foot minimum clearance on top.

F. Condensate Control

Dehumidification is part of the function of your air conditioning system. The moisture removed from the air is condensed into water and is then referred to as "condensate". The condensate forms and is collected on the evaporator coil which is located in the air handling unit (except on one-piece package units). The condensate drain removes the water. Regular maintenance by the A/C contractor of the drain pan and line should be performed to control algae build-up and eliminate water leaks.

Homeowner's Maintenance Guidelines

Install algae tablets in the condensate drain pan regularly. Flush condensate drain pan regularly. Flush condensate drain lines regularly. Drains should be flushed from the inside of the house towards the outside. Never open the air handling unit without first disconnecting the power. Algae tablets are available through your air-conditioning contractor or home improvement center.

Helpful Hints:

a. Check and replace or clean filters, every month. Clogged filters mean higher operating costs.
b. Don't try to maintain different temperatures in different rooms by totally closing duct outlets, you will unbalance the system and reduce its efficiency.
c. Use bath and kitchen exhaust fans sparingly when air conditioning is operating.
d. To reduce the time your air conditioner must be on, do heat-producing chores such as baking and dish washing, during the cooler hours in the morning or evening.
e. Check weather stripping and caulking around doors and windows for leaks.
f. Shade your home with trees wherever possible.
g. Keep all windows and exterior doors shut when air conditioner is on.
h. Do not short cycle your compressor by moving the thermostat up and down too rapidly. Set your temperature slowly and leave it for at least 5 minutes before resetting.
i. If case of outside temperatures exceeding 95°F, a differential of 15°F is acceptable.

Homeowner's Maintenance Guidelines

Keep the outside condensing unit level and keep the area surrounding the unit clear to allow unimpaired air flow. Do not plant bushes near the unit and be careful that dirt, leaves and grass clippings are cleared away. For a thorought cleaning, contact an HVAC contractor.

Do not build around or over the air conditioner unless there is an 18 inch clearance on the sides and a 6 foot minimum clearance on top.

Solutions to Common Heating & Air Conditioning Problems

Problem	Likely Cause	Solution
Air temperature in different rooms or floors is uneven.	Air distribution unbalanced. Registers are obstructed.	Adjust air registers. Clear obstructions away from registers.
Reduced air flow or excessive dust on vents and registers.	Dirty air filter.	Clean or replace air filter as necessary.
Heat, fan or air conditioner not operating.	Circuit breaker or fuse tripped.	Reset circuit breaker at panel box or unit.
Air conditioner not operating properly.	Outside unit obstructed by debris; bushes leaves, etc.	Clear obstructions from top and sides of unit.
Inside air handler is leaking water	Condensate drain clogged or inside coil is frozen.	Call HVAC contractor. Check manufacturer's warranty.
Inside or outside coil is frozen.	Low refrigerant or dirty air filter.	Call HVAC contractor. Clean or replace filter. Raise thermostat by 90° to thaw.
Excess water on window panes.	Excess humidity in home.	Adjust thermostat setting. Use exhaust fans while cooking or bathing.
Burning smell when heat first turned on.	Accumulated dust on electrical coils.	Normal. Happens once each year.

APPLIANCES

Introduction
Your home may be equipped with a variety of appliances, such as an electric oven, range hood, dishwasher, refrigerator, microwave oven, garbage disposal, washing machine and dryer. At move-in time you should test all appliances for proper operation. Where applicable, fill out and mail in warranty cards. Failure to do so may void the Manufacturer's Warranty. Review the Manufacturer's Service Manuals for operation and maintenance instructions. File your manuals in a convenient location for future reference.

Many manufacturer's offer toll-free customer service to answer questions about appliance problems and operation.

For appliance repair protection that extends beyond the manufacturer's warranty period, we suggest you consider a service contract available through an appropriate local contractor or the manufacturer.

If you purchase your own appliances, carefully measure existing appliance openings to ensure proper fit. Check that doorway widths leading to the final appliance location are wide enough to move the appliance through.

Homeowner's Maintenance Guidelines
Before calling for service:
If an electrical appliance fails to work, complete the following checklist before calling the appropriate contractor, otherwise, you may be charged for a service call.

1. Check that the appliance is plugged in.

2. If the appliance is plugged into a wall-switched electrical outlet, make sure the switch is "ON". If the appliance is plugged into the GFCI circuit, check and reset the button if necessary.

3. The circuit breaker in the panel box controlling the appliance should be in the "ON" position.

4. Some appliances come with their own separate fuses or circuit breakers. Review the Manufacturer's Service Manual for the exact location, then check for proper setting.

5. Annually check the dryer vent for obstructions. Accumulated lint should be removed by disconnecting and then vacuuming the dryer vent.

Helpful Hints:
Refrigerators/Freezer: Check and clean the gaskets regularly to ensure a tight seal. Refrigerator and freezer temperatures should be set at the temperatures recommended by the manufacturer. DO NOT PLUG a refrigerator or freezer into a "ground/fault" (GFCI) receptacle, because the circuit may trip and not be discovered for some time, allowing the contents of the refrigerator or freezer to spoil.

Dishwasher: Use only when you have a full load. Use the shortest wash cycle.

Cook Tops/Stoves/Ovens: Do not allow dirt to accumulate. Clean with a recommended over-the-counter-cleaner. Do not use harsh abrasives unless specified. Clean all filters regularly.

Garbage Disposal: Always use cold water when disposal is working. Grease, Corn cobs and husks, bones, celery, or any other food that shreds should not be put into the disposal. If the machine becomes jammed, use the wrench to free the mechanism and try again. The disposal will rust if not used regularly. If you are going to be away for an extended period of time, a teaspoon of oil will help prevent the mechanism from freezing.

Range Hood Fan or Microwaves: The range hood fan filters collect grease and should be cleaned regularly. Soaking the filters or lightly brushing them in hot soapy water is the best cleaning method. Be sure the filters are dry before reinstalling them.

Microwave Oven: Be sure that vent louvers are not blocked.

ATTIC

Introduction
The attic space below the roof is part of the roof truss system. When inspecting the attic, walk on the wood members only. The drywall ceiling of the room below is not designed to support any weight.

Homeowner's Maintenance Guidelines
The attic truss system is not engineered to support additional weight and should not be used for any storage purpose. Materials stored can also be a fire hazard. Do not cover any vents with insulation or any other material. Insulation on the attic floor is for the thermal protection of the rooms below. If the insulation is moved, it will leave gaps between the insulation panels and may obstruct the attic vents. Always replace moved insulation back to its original position.

Building codes require attic and crawl space vents to minimize accumulation of moisture. Attic ventilation occurs through vents in the soffit (the underside of the overhangs) or on gable ends. Driving rain or snow sometimes enters the attic through these vents. Do not cover them to prevent this. Instead, cover the insulation in front of the vent. When you do this, precipitation that blows in safely evaporates and ventilation can still occur.

BATHROOM MAINTENANCE

Homeowner's Maintenance Guidelines
Mildew: Moisture and mildew problems will occur in any room where water vapor is present. To reduce mildew, turn on the exhaust fan or slightly open a window when bathing. Wipe off fiberglass shower enclosure when done, then hang up towels and washcloths to dry. To clean mildewed surfaces and reduce mildew odors, apply a liquid mildew agent in a well ventilated room, followed by a disinfectant and thorough rinsing with clear water. Moisture and mildew removal is a homeowner's responsibility.

Soap Scum: In some geographic areas, water that is high in mineral content can contribute to soap scum buildup. To clean and remove this residue, wash the affected surfaces with a mild vinegar and water solution or use mildew removers found in some stores.

Rust Stains: The contact of wet metal on sink surfaces, for example, the bottom of a shaving cream can, may product rust stains. To remove them, apply a powdered rust remover, carefully following the manufacturers instructions.

Ceramic Tile Floors

Introduction
The ceramic tile floors in your bathrooms, kitchen or entry are easy to maintain and, if properly maintained, will be impervious to water. The seams, joints and sealers are not waterproof and require proper maintenance to prevent water seepage and damage to materials adjacent to and underneath the tile.

Cracks in the caulking joints between tub/shower and floor/wall, are normal and are caused by the high degree of moisture present in every bathroom, as well as from the normal shrinkage of caulking material. Separation between the tub and wall is caused by the weight of the tub when filled with water.

Regrounting and recaulking is a homeowner maintenance responsibility for the life of the home. For other problems concerning bathtubs, sinks, etc., see the Plumbing Fixtures Section.

Grout Stain Removal Guide

Stain	Removal Agent
Grease and Fats	Soda and water or commercial spot-lifter
Inks and Dyes	Household bleach
Mercurochrome	Ammonia
Blood	Hydrogen Peroxide or household bleach
Coffee, Tea, Food, Fruit Juices, Lipstick	Neutral cleaner in hot water, followed by Hydrogen Peroxide or household bleach

Homeowner's Maintenance Guidelines
Caulk cracks and separations of seams adjacent to tile with a top quality flexible caulk, taking care to wipe the tile clean once caulking is complete. Do not use clear silicone-based caulk since it yellows with age and stains easily. See Re-Caulking of Tubs and Showers in The Plumbing Section.

CABINETS

Introduction
Kitchen, laundry room and bathroom vanity cabinets are all selected for their attractive appearance, durability and ease of care. With proper maintenance, the cabinets will remain serviceable and attractive for many years.

Homeowner's Maintenance Guidelines
Wood Cabinets: Wood cabinet tone, grain and color variations are normal and reflect the natural characteristics of real wood.

Clean wood cabinets with the same gentle care you would give any fine wood furniture. A light coat of wax or lemon oil applied once or twice a year will protect the finish and enhance the appearance.

Cabinet mounted coffee makers are not recommended since the rising steam will damage solid wood and wood veneer, causing fading or delamination. For the same reason, position regular coffee makers out from underneath the upper cabinets and near the front of the counter.

Shelves: Shelves are not designed to hold weight that exceeds 20 pounds per square foot. Keep canned goods, flour, sugar and heavier products on the bottom shelf of the base cabinets. If desired, apply contact paper to shelves to protect against scratches and stains.

Drawer and Hinge Care: Check the hinges at least once a year for proper alignment and tightness, using a screwdriver to make necessary adjustments. Check drawers for easy movement and apply a silicone spray to the drawer guides should sticking occur.

Repairing Nicks and Scratches: Hardware stores offer color-matching putty, stains, and polymer fillers to cover and repair cabinet nicks and scratches.

The homeowner is responsible for fading damage or delamination caused by heat, steam or water intrusion.

CABLE T.V. SYSTEM

Introduction

Homeowner's Responsibility: The homeowner is responsible for contacting the local cable company for the initial hook-up. Roof antennas and/or satellite signal receiving dishes are not allowed in some communities and you should check with your Homeowner's Association (if applicable) before proceeding with any installation.

CONCRETE

Foundation and Floor Slabs: In construction, the floor slab, garage slab, foundations and footings are all poured with concrete. Most builders use heavily reinforced concrete slab construction.

One thing to understand about concrete is that it will crack!

It is important to understand that concrete is a porous material that will expand, contract, and crack as a result of temperature changes, shrinkage, stress and settlement. Hairline cracks that may be visible on garage and interior concrete floors are common and are usually cosmetic, as opposed to structural. Shrinking occurs from the normal curing process of concrete that varies with the time of year and the moisture conditions that exist when the concrete is poured. Slab stress and settlement are caused by soil conditions and loads such as the weight of the walls. These forces can create a variety of stresses which, in combination with seasonal temperature variations, can cause concrete and masonry foundations to develop non-structural cracks.

Home Slab and Garage Slabs: Due to the large size of concrete home and garage slabs, hairline cracks less than 1/4 inch in width are common, and are usually the result of expansion and contraction. These cracks are normal and it is best to leave them alone, since attempts to fill the cracks will not stop the expansion and contraction. Long "hairline" cracks in slabs, patios, garage floors, sidewalks and driveways are common and require no additional attention. They are cosmetic in nature and do not affect the integrity of the concrete. Any attempt to repair chips or

cracks in concrete or replacing sections of concrete will result in product and color variation.

Color variations in concrete are a common occurrence and are beyond the control of the builder or subcontractor.

Homeowner's Maintenance Guidelines
Clean concrete with a solution of five tablespoons of baking soda to a gallon of water. Before using the cleaning solution, wet the floor with clear water and loosen the dirt with a steel brush or scraping blade.

A concrete sealer may be applied to the floor, following the manufacturer's directions, approximately six months after you move in. This will make it easier to clean and will reduce concrete dusting. Note: Use of concrete sealer may make the floor slippery when wet.

A. Concrete Block

Introduction
In many homes concrete blocks are used to construct the exterior walls. The concrete blocks are set in place and may be reinforced with steel and additional concrete. Vertical or horizontal cracks caused by temperature changes and home settlement are usually cosmetic as opposed to structural and are a homeowner's responsibility.

B. Sidewalks, Patios, Porches, Steps & Stoops

Introduction
In most cases, exterior concrete cracks are due to expansion and contraction because of temperature variations, soil movement and slight home settlement.

Homeowner's Maintenance Guidelines
Lawn fertilizer left on the sidewalk and patios will stain the concrete and cause rust spots. This can be prevented by immediately hosing off the driveway, sidewalk or patio after applying fertilizer.

Water used to irrigate lawns may also cause driveway, sidewalk and patio staining and mildew, and continuous contact should be avoided. Keep excessive weight, such as sand, lumber and moving vans, off the concrete to prevent cracking. Rust and grease stains are a homeowner's responsibility.

C. Asphalt Driveways - *see supplement at end of this section on pages 3.42 through 3.43*

"Blacktop" or asphalt driveways require little or no structural maintenance for quite a few years. As the driveway ages, the deep black color will most likely fade and appear light black or gray. The blacktop can be brought back to look like new by applying a seal coat annually or as often as desired. Be sure to follow the manufacturer's instructions when applying the new material. For extensive and structural repairs, we suggest you retain a professional asphalt contractor.

To extend the life of the asphalt driveway, avoid gasoline or oil spills if possible. Clean off any excessive fertilizer that may fall on the driveway as soon as possible in order to avoid discoloration.

CONDENSATION / MILDEW

Introduction
Condensation, or the appearance of moisture that occurs when warm moist air comes into contact with a colder surface, is most prevalent in new homes, especially during the first year. This is caused by the large quantities of water used to build the new home, from the concrete foundations to the paint on the walls. As this water evaporates, and the drying out process occurs, the moisture takes the form of condensation on interior windows.

Another source of indoor humidity is everyday water usage. For example, a family of four doing laundry, bathing and using the dishwasher, puts approximately 2 to 5 gallons of moisture into the air every day.

Window condensation is produced by conditions beyond your builder's control.

Mildew is a fungus that spreads through the air in microscopic spores. They love moisture and feed on surfaces or dirt. On siding, they look like a layer of dirt. Cleaning mildew from your home is your responsibility. Solutions that remove mildew are available from local paint or home improvement stores. Wear protective eyewear and rubber gloves for this task; the chemicals that remove mildew may be unfriendly to humans.

Homeowner's Maintenance Guidelines
Ventilation: Proper ventilation is the safe and steady way to reduce indoor humidity, condensation and mildew.

1. Ensure that the clothes dryer is properly vented to the outside and that the vent is clear of obstructions and lint. Do not push the dryer too far back or the vent hose may become kinked and therefore obstructed.

2. Kitchen, bath and utility exhaust fans can be used to carry moist air outside. Use the fans for short time periods since they exhaust cooler air-conditioned air outside the home.

3. Adjust the registers to maintain even temperatures throughout the house. Do not try to speed up the evaporation process by creating extremely high temperatures in the wintertime. This will cause the house to dry out unevenly, creating cracks and other problems.

COUNTERTOPS & VANITY TOPS

Introduction
Kitchen and bathroom counter tops are covered with laminate material or manufactured with synthetic materials.

Homeowner's Maintenance Guidelines

A. Laminate Counter Tops
Clean laminate counter tops with a soapy cloth or sponge, or use a non-abrasive liquid household cleanser for more stubborn stains. There are one-step cleaning products available for laminates

that clean, reduce streaking, and leave surfaces polished. As with all cleaning products, carefully follow the manufacturer's instructions.

Caution: *Keep standing water away from the backsplash, side splashes, seams and seal around the sink. These areas are prone to water damage, since excessive moisture will eventually break down the seal and cause swelling or delamination of the counter top, check seams periodically and re-caulk as necessary.*

If countertops or back splashes swell or buckle, it may be due to not maintaining the caulking. This is an important part of your routine maintenance.

B. Cultured Marble Vanity Tops

Clean cultured marble with a damp cloth and a non-abrasive detergent. When re-caulking, use a flexible caulk. Use of a gel-gloss or aerosol spray may be used for polishing.

Counter Top Precautions:

1. Keep counter top dry at all times.

2. Excessive heat can cause charring, burning, lifting or blistering. Do not place hot pans, coffee pots, baking dishes, hot irons, or burning cigarettes directly on counter top surfaces. Use protective hot pads or trivets under counter top electrical appliances.

3. Always use a cutting board since knives will cut the surface.

4. Steam from an open dishwasher may cause swelling and delamination. Allow time for the dishwasher to cool before opening the door. To further reduce moisture damage, apply a silicone spray to the underside of counter tops, directly over the dishwasher and two feet left and right of the dishwasher.

5. Do not use clear silicone caulk, as it yellows with age and stains easily.

C. Solid Surface Countertops

Caring for your solid surface countertop is as simple as wiping the surface with a damp cloth. If a stain develops, wipe it away with soap and water. If this does not remove the stain, consult your manufacturer's instructions on products which can be used on your top. Do not expose the surface to harsh chemicals, such as paint remover, turpentine, nail polish remover or stove and drain cleansers. If these chemicals come in contact with the surface, immediately wash them off with water, using appropriate safety measures to avoid injury.

Although solid surfacing can be repaired, certain steps should be taken to protect it. Be sure to use a cutting board instead of cutting directly on the surface. Hot pans and heat-producing appliances, when set directly on the countertop, can mar the product's beauty.

DOORS

Introduction
Your home comes with a variety of doors, which may include interior doors, French doors, bi-fold doors, sliding glass doors, exterior doors and garage doors.

A. Interior Doors

Interior doors expand and contract in reaction to temperature and moisture changes, and will be wider in humid summer periods and narrower during dryer winter months.

Homeowner's Maintenance Guidelines
Sticking Doors: Home settlement or damp weather may cause swelling that puts the doors out of alignment. In some cases, this may only be temporary due to seasonal variations and the sticking will tend to correct itself without any adjustment. If a door becomes inoperable as a result of warping it will be addressed at the 6 month inspection.

If door adjustment is required:
1. Check hinge screws for tightness.
2. Fold sandpaper around a wooden block and sand the edge that sticks. A small plane can also be used, but be careful not to remove too much material from the door. Also the use of a bar of soap on the door top and frame may help.
3. Always paint or varnish sanded or planed areas to protect the wood from future moisture penetration and sticking.

Door Precautions: Interior doors are usually hollow core and are not designed to support attachments and hanging accessories. Hanging heavy items on door knobs, or at the top of a door, can damage hardware and hinges. These doors are also undercut to allow air movement.

Slamming: Slamming doors can damage both doors and jambs, and can even cause cracking in walls. Teach children not to hang on the doorknob and swing back and forth; this will loosen the hardware and cause the door to sag.

Shrinkage: Use putty, filler or latex caulk to fill any minor separations that develop at mitered joints in door trim. Follow with painting. Panels of wood doors shrink and expand in response to changes in temperature and humidity. Touching up the paint or stain on unfinished exposed areas is your home maintenance responsibility.

B. Bi-Fold Doors

Keep the door tracks free of paint and dirt, and apply a small amount of silicone spray to the guide edges of the tracks.

C. Sliding Glass Doors and French Doors

Keep sprinklers away from sliding glass doors and French doors when watering the lawn. Sliding glass doors have been sealed against water, but occasionally, high winds and driving rains can cre-

ate a vibration that causes some leakage. Neither this, nor the water that accumulates in the tracks can be prevented. This is also true for French doors.

Clean glass with a spray glass cleaner and wipe frames with sudsy water and a soft cloth. Periodically clean the bottom of the door track, and check to ensure that drain holes are clear of obstructions. To keep the doors moving freely, apply a silicone spray to the tracks. Do not use oil, which may cause premature deterioration of the rollers.

In some case, the glass is tinted to help block the rays of the sun. If you feel you need solar protection film on your glass, it is important to note that ALL SOLAR FILM MUST BE APPLIED TO THE INSIDE PANE OF GLASS. Otherwise, heat build-up between the layers of glass will cause the glass to crack.

D. Exterior Doors

An exterior door that is properly aligned, fitted, weather-stripped and maintained, will help control energy costs. Exterior doors are often steel clad or fiberglass to prevent warpage and to maximize insulation. An exterior door will warp to some degree, due to temperature differences between the inside and the outside surfaces. Warpages shall not exceed 1/4" measured diagonally from corner to corner. Maronda will not warrant exterior doors with plastic plantons that have melted from excessive heat when a glass storm door has been installed.

Wood exterior doors should be checked every six months for signs of weathering and repainted as necessary.

Painting: Steel clad or fiberglass doors are maintenance-free and require little attention except for painting and upkeep from dents and scratches.

Weather Stripping: Weather stripping on exterior doors helps maintain the home's energy efficiency, preventing the loss of conditioned air, and reducing the infiltration of outside air. Weather stripping must remain in place to operate effectively.

1. Replace weather stripping that becomes loose or damaged.

2. Prolong the life of vinyl and rubber weather stripping by applying a silicone spray.

3. The sweep weather stripping at the bottom of the door may require replacement from time to time. To replace, remove the sweep and match with a replacement available at most hardward stores.

4. To raise or lower the threshold, adjust the screws on the wood or metal portion of the threshold. Keep threshold caulked at all times.

5. Keep sprinklers away from doors

Note: Replacement of any exterior door voids any related warranty item.

DOOR HARDWARE / LOCKS / HINGES / KEYS

Homeowner's Maintenance Guidelines

The brass door locks, door handles, hinges and stoppers used throughout the home are exposed to both inside and outside elements, pollution, extreme elements, and common everyday use. This may cause them to discolor or become pitted. The manufacturer does not guarantee the finish of any product. Clean these with a damp cloth and do not use abrasive cleansers or solvents. Periodic polishing, following manufacturer's recommendations, will help maintain the original luster and appearance. Do not use brass polish on lacquered brass parts or fixtures.

Locks: Lubricate door locks with graphite or other waterproof lubricant. Avoid oil, as it will gum up.

Failure to Latch: If a door will not latch because of minor settling, you can correct this by making a new opening in the jamb for the latch plate (remortising) and raising or lowering the plate accordingly.

Hinges: You can remedy a squeaky door hinge by removing the hinge pin and applying a silicone lubricant to it. Avoid using oil, as it can gum up and attract dirt. Graphite works well as a lubricant but can create a gray smudge on the door or floor covering beneath the hinge if too much is applied.

Keys: Keep a duplicate privacy lock key where children cannot reach it in the event a youngster locks himself or herself in a room. The top edge of the door casing is often used as a place to keep the key. A small screwdriver or similarly shaped device can open some types of privacy locks.

Your interior door locksets can work loose over time. If you notice excessive play in the lockset, we recommend tightening the screws located in the cover plate. If the doorknob has become inoperative, it could mean that the interior mechanism has slipped out of place. Remove the knob, realign the interior mechanism, reset the knob, then tighten the exterior screws. Should a lock be hard to operate, apply a graphite lubricant to the keyhole and lock mechanism. This will usually help the lock to operate more smoothly.

ELECTRICAL SYSTEM

Introduction

The electrical system in your home is designed for safe, trouble-free service and meets both local and national electrical code requirements. Any additional alteration, or modification to the original electrical system installation will void all applicable warranties.

Homeowner's Maintenance Guidelines

Electrical Safety Cautions: Do-it-yourself electrical wiring is dangerous. Improper electrical wiring is dangerous. Improper electrical repairs can endanger the lives of your family and jeopardize your homeowner's insurance in the event of fire or electrical injury. Always use a licensed electrician to make electrical repairs, adjustments, and additions.

Electrical Storm Caution: *It is recommended that you unplug television sets, computers, and telephones during electrical storms.*

Power Failure: If the electrical power goes out, check first to determine if neighbors are also without power, and if so, contact the utility company. Before attempting to reset the circuit breakers, check that power has been restored to the area. If neighbors have power, check the main circuit breaker in the panel box. See Homeowner's Maintenance Guidelines under Circuit Breakers, this section.

Be aware that not every electrical power problem is due to problems within the home's electrical system. Utility companies experience a variety of situations that effect power supplies, including power surges and interruptions, peak overload periods, and even total shutdowns.

Electric Meter: The utility company installed an electric meter to measure your electric usage for billing purposes. Their invoice is based on kilowatt hours used over a given time period, with a kilowatt-hour being the energy expended by 1000 watts for one hour. Should you have any questions about the meter functions, please contact the customer service department at the utility company.

Circuit Breakers: Electrical wiring and appliances are protected by circuit breakers to stop circuit overloading. The main circuit breaker is located in the electrical panel box, and if tripped for any reason, entirely cuts off all electricity to the house. The smaller circuit breakers within the panel box control appliances, wall switches, lighting, and the HVAC system, and each switch should be clearly marked as to what it controls.

Do not tamper with the electrical service entrance cable that provides power to the service panel.

Circuit Tripping Causes and Remedies: Thunderstorms, lightning and power failures can cause circuit breakers to trip. If only your home is affected, try to reset by switching the breaker to full "OFF" then back to full "ON" position. If this does not reset the breaker, or if the breaker continues to trip, do not continue resetting the breaker as this can damage the panel box, wiring, or the appliance that it controls. Call a licensed electrical contractor for a service inspection.

Overloaded circuits can also cause tripping. This occurs when too many appliances are used on one circuit. To reduce the load, remove plugs of appliances that may cause the overloading, then reset the breaker as described above. If you install a microwave oven or other appliances that require large electrical loads, you may need a licensed Electrical Contractor to add additional wiring to accommodate the load.

Outlets and Wall Switches: If an electrical outlet does not work, check first to make sure that the outlet is not controlled by a wall switch. If the outlet still does not operate contact an Electrical Contractor.

Ground Fault Circuit Interrupters: GFCI electric outlets help to prevent electrical shock, and are installed in kitchens, bathrooms, garages and exterior areas where water may be present. GFCI receptacles are sensitive to power surges and interrupt power under certain conditions to prevent injury. Do not plug refrigerators or freezers into GFCI outlets.

GFCI outlets are often wired in a series. For example, the garage GFCI outlet controls the bathroom, and may possibly control other outlets throughout the home. Taking this example further, if the electrical outlet in the bathroom is not functioning, check the GFCI in the garage. Also be aware that some homes have multiple GFCI's so be certain to inspect and reset the affected outlet.

Do not plug a refrigerator or freezer into a GFI controlled outlet. There is a good chance that if the GFCI trips, your food will be ruined before you notice the problem.

If a GFCI's receptacle is not functioning, press the "RESET" button on the wall plate to restore proper operation. If that does not work, check and reset the circuit breaker in the panel box first, then press the GFCI Reset button. If the outlet still fails, it may indicate a short in the appliance. If other appliances will not operate, an electrician should be contacted and the GFCI replaced.

To test GFCI's, press the "TEST" button on the receptacle. The outlet should not perform. To reset, press the reset button.

Prewired for Telephones: Most homes are prewired for telephones. If you experience problems with the telephone system you should contact your local phone company.

If the telephone company states that there is trouble in the house wiring and your house is less than one year old, please call your builder.

LIGHT FIXTURES

Homeowner's Maintenance Guidelines

Interior and exterior lighting fixtures required periodic homeowner maintenance to preserve the finish. Carefully review and follow the instructions (if provided) for these fixtures. Interior and exterior fixtures will tarnish and the manufacturer does not warrant the finish.

Always turn the power off at a wall switch or circuit breaker before cleaning any electrical device. The danger of a severe shock will still exist if the device is turned off with a built-in switch.

Do not use indoor bulbs in outdoor lighting fixtures if the bulb is to be exposed to the weather. Do not use light bulbs with a higher wattage than the maximum wattage stated on the light fixture.

SECURITY SYSTEM

Some homes are equipped with security systems and their operating instructions and warranty information are contained in their respective manuals and product literature.

SMOKE DETECTORS

The smoke detectors in your home are pre-wired, per electrical code requirements, into the main electrical system. In case of electric failure, the smoke detector is backed up with a 9-volt battery.

Homeowner's Maintenance Guidelines

Test the detectors and clean and vacuum the openings of the smoke detector once a month. Visually inspect the clear button on the text switch to see that the indicator light is glowing. To test the alarm, press the Test-button for about ten seconds, or until the horn sounds lightly. Do not use an open flame to test the detector.

The unit will emit a low-frequency beeping noise if a malfunction or power failure occurs or if the battery is low. Change the 9 volt battery every 6 months to ensure proper operation.

EXTERIOR WALL FINISHES

Introduction
Exterior finishes are applied once the exterior framing and/or concrete block is complete. The exterior of your home may be finished with brick, siding and/or stone.

A. Brick
Brick is used extensively throughout the United States. It is probably the lowest maintenance finish of all home exterior finishes.

The mortar between the bricks may require some tuck-pointing (filling in) as your home ages. The weep holes in the brick are there to allow moisture out. Do not fill these holes or allow landscaping material to cover them.

Efflorescence: A white powdery substance that may appear on the exterior walls is called efflorescence. It is normal and is composed of water soluble salts, originally present in masonry materials, that are brought to and deposited on the surface when water evaporates. Most efflorescence can be removed with a stiff scrub brush, water and vinegar.

B. Stone Veneer
Slight variations in size, color and placement create the textural interest that contributes to the look of a stone exterior. Minor stone chipping, cracking and cement shrinkage are normal.

C. Siding
Siding expands and contracts in response to changes in humidity and temperature. Slight waves are visible in siding under certain weather conditions, this cannot be entirely eliminated.

D. Soffit and Fascia
The aluminum soffit and fascia (where applicable) have a baked enamel finish that does not require painting. Wood fascia do require painting and caulking. The soffit vents are located under the roof overhang. The fascia is used behind gutters and to cover gable trim boards.

Solutions to Common Exterior Finish Problems

Problem	Likely Cause	Solution
Dents in soffit or fascia.	Abusive treatment.	Replace panel.
Siding blows off.	Strong winds.	Call during first year for inspection.
Siding blows off.	Strong winds.	Act of God. Review homeowner's insurance policy
Dirty siding.	Adverse weather conditions and soiling.	Periodic hosing. See manufacturer's recommendations.
Siding has dirty, streaked appearance.	Mildew and fungus growth.	Apply commercial mildew cleaner following manufacturer's direction.
Cracking/peeling of painted surfaces.	Normal aging and weathering.	Clean and sand surface, then prime and repaint.
Gaps at joints in wood trim.	Normal caulk and filler shrinkage.	Re-caulk or fill.
Sap on exterior trim.	Wood drying out.	Sand, prime and paint.
Efflorescence on masonry finishes.	Crystallized soluable salts	Scrub with water and stiff brush.
Cracks or stairstep cracks in masonry finishes.	Normal home settlement.	Seal cracks with a flexible masonry caulk.

FIREPLACES

Introduction

Gas Fireplace: Maronda uses a fabricated, ventless, gas log fireplace that is delivered to the homesite and then installed with a screen.

When the fireplace is initially started, there will be a burning odor which should dissipate. A slight delay between turning the switch "on" and the flame ignition is normal. The flames should ignite gently and silently. If you notice any deviation from this and any gas smell, immediately shut off the switch and report it to the gas company.

Annually, gas logs should be cleaned to avoid smells and "ghosting" (previously described).

Unvented gas heaters are a supplemental zone heater. They are not indended to be a primary heating appliance. Water vapor produced by an unvented heater can create moisture roblems in a home when operated for extended periods of time.

FLOORING

Introduction

Your home may be finished with a variety of flooring materials, including carpet, vinyl, hardwood or laminate floors and ceramic tiles.

A. Carpeting

The carpet is durable and requires minimal care. Color variations and shading may be noticeable, and depend upon the surface texture and pile fiber of the carpet.

Homeowner's Maintenance Guidelines

Frequent vacuuming and immediate stain removal are primary carpet care steps. When using carpet cleaners, carefully follow manufacturer's instructions.

While normal vacuuming will only remove loose fibers from carpet yarns, an occasional tuft may be lifted above the surface. Do not pull out the tuft: just snip if off to the length of the other tufts using scissors. Color fading and spots caused by sunlight are normal and can be minimized by using the draperies during the day, or by using sheer draperies to reduce incoming sunlight. Some colors may fade faster than others.

Change filters in your heating and air conditioning systems on a regular basis or when dirty. Dust, pollen and smoke will settle on your carpets and increase staining and soiling.

When a spill occurs, immediately blot it firmly with dry, white paper towels or rags. Do not rub the spot as it will damage your carpet's tufts and may permanently alter your carpets appearance. If stain remains, spray with cold water and blog again. Repeat if necessary.

Cleaning: You can add years to the life of your carpet with regular care. Carpet wears out because of foot traffic and dirt particles that get trampled deep into the pile beyond the suction of the vacuum.

The dirt particles wear down the fibers like sandpaper and dull the carpet. The most important thing you can do to protect your carpet is vacuum it frequently.

Vacuum twice each week lightly and once a week thoroughly. Heavy traffic areas may require more frequent cleaning. A light vacuuming is three passes, a thorough job may need seven passes. A vacuum cleaner with a beater-bar agitates the pile and is more effective in bringing dirt to the surface for easy removal.

Vacuuming high-traffic areas daily helps keep them clean and maintains the upright position of the nap. Wipe spills and clean stains immediately. For best results, blot or dab any spill or stain, avoid rubbing. Test stain removers on an out-of-the-way area of the carpet, such as in a closet, to check for any undesirable effects. Have your carpet professionally cleaned regularly, usually once a week.

Some problem conditions that may occur with your new carpet and our suggested remedies are presented below:

Stains: No carpet is stain proof. Although your carpet manufacturer designates your carpet as stain-resistant, some substances may still cause permanent staining.

Cleaning Stains: First, scoop-up or blot as much of the spill as possible from the carpet. With a white cloth rag, blot from the edges toward the center of the stain until dry.

For asphalt, butter, chocolate, cooking oil, furniture polish, grease, food, lipstick, mascara, oil, shoe polish, tar, apply a small amount of dry cleaning fluid (non-oil type commonly used for spot removal from garments) to a dry white cloth towel and blot. Repeat and blot with paper towels until the spot is dry.

For ice cream, latex paint, excrement, mayonnaise, milk, vomit, and white wine apply a small amount of detergent or a recommended cleaner or solvent to a dry white cloth towel and blot. Repeat and blot with paper towels until the spot is dry.

For fruit drinks, berries, blood, coffee, fruit juice, ketchup, mustard, soft drinks, tea and red wine mix 1/2 cup household hydrogen peroxide with 1 tsp. clear ammonia and dampen the spot with a small amount of the mixture. Apply with damp towel. Let stand for 2 to 3 hours under a weighted sheet of plastic wrap. Blot with paper towels until dry. Apply a little undiluted white vinegar only after stain is removed.

NEVER APPLY DETERGENTS OR STAIN REMOVER DIRECTLY TO CARPET!

This could cause permanent discoloration. For recommended cleaners and solvents, call the fiber producer.

When a stain reappears after cleaning, it means all the stain and cleaners were not removed completely. Recleaning is necessary. Always rinse your carpet thoroughly to remove any detergent residue.

Burns: Take care of any kind of burn immediately. First snip off the darkened fibers. Then use a soapless cleaner and sponge with water. If the burn is extensive, talk with a professional about replacing the damaged area.

Crushing: Furniture and traffic may crush a carpet's pile fibers. Frequent vacuuming in high-traffic areas and glides or cups under heavy pieces of furniture can help prevent this. Rotating your furniture to change the traffic pattern in a room promotes more even wear. Some carpets resist matting and crushing because of their level of fiber, but this does not imply or guarantee that no matting or crushing will occur. Heavy traffic areas such as halls and stairways are more susceptible to wear and crushing. This is considered normal wear.

Fading: Science has yet to develop a color that will not fade with time. All carpets will slowly lose some color due to natural and artificial forces in the environment. You can delay this process by frequently removing soil with vacuuming, regularly changing air filters in heating and air conditioning systems, keeping humidity and room temperature from getting too high, and reducing sunlight exposure with window coverings.

Filtration: If interior doors are kept closed while the air conditioning is operating, air circulation from the closed room flows through the small space at the bottom of the door. This forces the air over the carpet fibers, which in turn act as a filter, catching particulate pollution. Over time, a noticeable stain develops at the threshold.

Rippling: With wall-to-wall carpeting, high humidity may cause rippling. If the carpet remains rippled after the humidity has left, have a professional restretch the carpeting using a power stretcher, not a knee-kicker.

Seams: Carpet usually comes in 12-foot widths, making seams necessary in most rooms. Visible seams are not a defect unless they have been improperly made or unless the material has a defect, making the seam appear more pronounced than normal. The more dense and uniform the carpet texture, the more visible the seams will be. Carpet styles with low, tight naps result in the most visible seams. Seams are generally more visible when the carpet is first installed. Usually with time, use and vacuuming the seams become less visible. You can see examples of how carpet seams diminish after they have been vacuumed and have experienced traffic in the model homes.

Shading: Shading is an inherent quality of fine-cut pile carpets. Household traffic causes pile fibers to assume different angles; as a result, the carpet appears darker and lighter in these areas. A good vacuuming, which makes the pile all go in the same direction, provides a temporary remedy.

Shedding: New carpeting, especially pile, sheds bits of fiber. Eventually these loose fibers are removed by vacuuming. Shedding will usually occur more with wool carpeting than with nylon or other synthetics.

B. Ceramic Tile Floors

Ceramic tile is easy to maintain and impervious to water. The grout joints are not waterproof and require special attention to prevent water seepage. Cracks appearing in grouting of tile joints or at junctions with other materials (i.e. baseboards) are the responsibility of the homeowner.

Homeowner's Maintenance Guidelines

Glazed and unglazed tile floors – Vacuum regularly to remove gritty particles. Damp mop using a solution of water and soapless detergent. If stained, use scouring power paste. Let stand five minutes, brush and scrub. Rinse and dry.

1. Never use abrasive cleaners or harsh chemicals or solvents on ceramic tile.
2. Unglazed tiles may need to be sealed on a regular basis.
3. Wipe off spills immediately.

Never use harsh cleaning agents such as steel wool pads which can scratch or damage the surface of your tile.

Grout Stain Removal Guide

Stain	Removal Agent
Grease and Fats	Soda and water or commercial spot-lifter
Inks and Dyes	Household bleach
Mercurochrome	Ammonia
Blood	Hydrogen Peroxide or household bleach
Coffee, Tea, Food, Fruit Juices, Lipstick	Neutral cleaner in hot water, followed by Hydrogen Peroxide or household bleach

C. Hardwood Floors

Most hardwood floors are pre-finished at the factory with a baked on wax coating or a urethane coating. Wood floor tone, grain and color variations are normal, and reflex the natural characters of real hardwood.

Some squeaking or separating of hardwood floors is normal and is caused by seasonal weather and humidity changes.

It is normal to expect surface nailing to occur around the perimeter area of pre-finished hardwood floors, and around any repair areas, as well.

Cupping, crowning or gapping are normal and occur from gaining or losing moisture on one side faster than the other. Neither the builder nor the manufacturer can stop this from happening. It is also due to natural growth rings in the tree and the part of the tree that has been used. In some instances, the cupping, crowning or gapping action may loosen nails or adhesive. The only way to control this occurrence is to try to keep your home at an even temperature and moisture level.

Homeowner's Maintenance Guidelines
Prior to cleaning your hardwood floors, carefully read and follow the manufacturer's instructions and recommendations.

Use entrance rugs or mats to protect wood flooring from dirt and water spots. Do not use rubber backed mats as they will remove the finish. Mop up water spills immediately. Do not set potted plants directly on a hardwood floor as moisture can leak through and cause permanent staining and warpage.

Attach furniture protectors to the bottom of furniture legs to protect the hardwood flooring form scuffing and surface damage. High heel shoes and constant moving of chairs can damage hardwood floors.

Extra care is required to keep hardwood floors dry and to promptly mitigate any unusual water intrusion that could occur.

D. Resilient Floor Coverings
Resilient floor coverings come in 6-foot and 12-foot wide rolls and are usually installed in kitchens, bathrooms and laundry areas. Before cleaning a resilient floor, read and follow the manufacturer's cleaning and care recommendation. Do not wax a "no-wax" floor.

FRAMING & CARPENTRY

Homeowner's Maintenance Guidelines
Mop up bathroom water spills from showers and baths immediately. Water seeping into the mastic through the seams and under the baseboard trim can cause mildew, seam separation and lifting. A flexible caulk, available at hardware stores, is recommended for use at tub and floor joints to minimize this problem.

Attach furniture protectors to the bottom of furniture legs to protect the resilient flooring from scuffing and surface damage. High heel shoes and constant moving of chairs may show and may damage resilient floor coverings.

Wall Framing: Wood studs are set vertically on 16 or 24 inch centers.

Roof Framing: Roof framing uses a pre-engineered truss system that supports the weight of the roof and can be used in combination with conventional ceiling and roof framing. The trusses are delivered to the building site by truck, and then placed and secured into position on the home using a crane.

Roof Sheathing: Roof sheathing covers and serves as base for the roofing materials.
As the wood in your home dries, normal shrinkage will occur that causes settlement. While every home has certain degrees of settlement, not all settlement is severe enough to require repair. Natural shrinkage and swelling will cause small cracks, chips and splits. These are acceptable under industry standards.

Insulation: Insulation is placed wherever there is likely to be a difference between interior and exterior temperature or humidity in the floors, ceilings, exterior walls, and the attic. Flexible insulation, in the form of fiberglass, is commonly used in walls, floors, ceilings and around air ducts. Blown insulation of

loose fiberglass can be used in ceiling areas. Plastic foam may be used for spot insulation around windows and doors, pipe openings and other air leakage points.

R-Value: This is an insulation measurement. The higher a material's "R value" number, the more effective it is as an insulator. Different parts of the home have different insulation standards.

GARAGE DOORS

Homeowner's Maintenance Guidelines

Garage doors with openers can be operated manually by pulling the release cord at the top of the garage door, near the track, and then lifting the garage door open. If minor garage door adjustments are required, contact an authorized repairman.

Please Note: Photo cells are not designed to be waterproof, and care must be taken when pressure cleaning or hosing out the garage. If the photo cells get wet they may not allow the door to close. We will not warrant the photo cells if this is deemed the cause of failure.

Garage overhead doors cannot be air tight. Some light will be visible around all the edges. Severe weather conditions may result in some precipitation entering around the door.

Caution: The installation of a garage door opener, unless installed as an available option, may void your garage door warranty. Garage doors are warranted for proper mechanical operation as installed. The installation of a garage door opener (by others) alters the operation of the door and the builder cannot be responsible for altered mechanical operation. When purchasing garage door openers ensure the opener will operate in the space and headroom provided.

INTERIOR WALLS & CEILINGS

Introduction

Your home has two types of walls, load bearing and non-load bearing.

1. Any alteration of load bearing walls may reduce the strength of the structure by altering its unit load capacity, its load bearing or its support capacity.

2. Interior wall construction begins with the placement of studs set vertically at specified intervals. Then the drywall is screwed and/or nailed to the studs.

Drywall: Drywall is screwed/nailed/and glued to the studs of the ceiling and wall surfaces. The seams where sheets of drywall come together are taped, spackled with a joint compound, allowed to dry and then sanded to prepare them for finishing.

The generally acceptable building standards are that slight "imperfections" such as nail pops, seam lines, and cracks not exceeding 1/8" are common in gypsum wall board installations. However, obvious defects or poor workmanship resulting in excess compound in joints, trowel marks and cracked corner beads are not acceptable and must be noted prior to closing. Both nail pops and small drywall cracks are simple to repair.

Drywall Nail Pops and Crack Repair Instructions:

1. Reset the protruding nail slightly into the gypsum board surface or remove it entirely. Place another drywall nail two inches above or below the popped nail, and gently hammer it slightly below the paper surface. Then cover the area with spackling compound, allow to dry, sand smooth, and then refinish the surface.
2. For drywall joint cracks, press a small "V" shaped indentation using the back of a putty knife along the length of the crack, about 1/8 of an inch deep and 1/8 of an inch wide. Spackle, sand and refinish as with nail pops.
3. To prevent cracks wider than a 1/4" from reopening, first apply the spackling compound over the crack with a strip of drywall tape, add another top layer of spackling, feathering the edges well, sand to a smooth finish, then refinish.
4. Deep scrapes and indentations on drywall surfaces can be filled with two or three applications of spackling compound. Allow it to dry thoroughly, and sand between each application

Touch-up painting of repaired areas will not blend perfectly with the original wall paint.

Interior Trim and Moldings:

Homes are built with various moldings including but not limited to floor moldings, door casings and other wood trims. Some separation of wood trims and moldings is normal and is caused by home settlement, plus shrinkage or expansion due to extremes of dryness or humidity.

Homeowner's Maintenance Guidelines

Should the baseboard trim come loose, simply re-nail the baseboard back into the proper position. For moldings, it is better to wait for several months to see if settlement will bring the pieces back together naturally. If not, a separation at corners or seams can be patched with a wood filler and then refinished to match the existing molding.

Shrinkage of wood trim occurs during the first two years or longer, depending on temperature humidity. All lumber is more vulnerable to shrinkage during the heating season. Maintaining a moderate and stable temperature helps to minimize the effects of shrinkage. Wood will shrink less lengthwise than across the grain. Wood shrinkage can result in separation at joints of trim pieces. You can usually correct this with caulking and touch-up painting.

When re-nailing baseboards, drive in another nail close to, but not exactly in, the existing nail hole. Fill the old nail hole with putty and touch up with paint as needed. If the base shoe (small trim between base molding and the floor) appears to be lifting from the floor, this is probably due to slight shrinkage of the floor joints below. Again, you can correct this condition by removing the old nails and renailing. You may prefer to wait until after the first heating season to make any needed repairs.

LANDSCAPING, GRADING, LAWN, SHRUBS & SPRINKLERS

Introduction

Landscaping plans are generally designed by a landscape architect, and approved by local officials. The home may be part of the entire communities' landscape master plan and therefore cannot be individually modified. Check with your Homeowners Association before doing any extensive landscaping changes.

A. Grading

The drainage plan for your community was designed by engineers and approved by the various authorities having jurisdiction. Storm water management is a critical part of the community design. The yard is carefully graded to direct storm water away from the house into areas where it can soak away or eventually flow into the community storm water drainage system. After heavy rains, it is normal to see significant areas of standing water. This is a deliberate part of the approved drainage design, it allows water to enter the drainage system slowly and also helps to limit the entry of nutrients, fertilizers, etc. into the interconnected fresh water system. After normal heavy rain, water should not be standing on paved areas after 48 hours. Swales and drainage areas may be wet for an extended period of time, particularly in times of heavy rain or melting snow.

Homeowner's Maintenance Guidelines

Over time, the grade around the house can settle. If this occurs, spread additional soil or sand in the depressions to raise and re-establish the grade.

To prevent erosion and ponding of water:

1. Do not alter the soil grade.
2. Keep water ditches or swales open and free of leaves and debris. Do not build sheds, hot tubs, decks, fences, pools, or gardens in the swales, otherwise, water may not flow properly through the swale.
3. Direct water run-off away from the home to prevent washouts. Reposition splash blocks if they are moved.
4. Do not allow sprinklers to wet the house or form puddles near or against the foundation.

B. Lawn

The yard is graded and the landscape contractor removes debris and rakes the ground surface prior to installing sod or grass seed, however topsoil may contain roots, stones and organic matter. The topsoil applied to a lot is usually the same topsoil from the plan that was stripped away and stock piled in the early phases of development. If a starter lawn seeding is to be installed, surface conditioning will be done prior to seeding. Surface conditioning will remove much (but not all) of the miscellaneous roots, stones, and other matter. Nevertheless, stones and

other matter may continue to work their way to the surface over time. It is the homeowners responsibility to remove them if their appearance is objectionable. No action is taken to remove roots, stones or other material below the surface.

Homeowner's Maintenance Guidelines
The future beauty of your yard depends on the care and attention you provide. The builder can not be responsible for homeowner neglect or improper landscape maintenance. The following suggestions should make the job easier.

Watering: Sod requires constant moisture until the second mowing. If allowed to dry out, the sod will shrink and gaps will appear between the sections. If this occurs, the homeowner will need to repair these areas. For the first 6 weeks water the lawn for 30 minutes once each day in the morning. Watering may be reduced after the second mowing to every other day for the next 8 weeks. When using the sprinkler system, check to see if you are leaving footprints, if so, the area has been over watered. Remember, too much water is just as bad as not enough.

Fertilizing: Fertilizer should be applied a minimum of three times a year for turf. In the winter months two applications are necessary and one should be a weed and feed. In the summer months one application should be applied. Spray insecticide every other month. Do not spray immature grass with chemicals to kill weeks. The best approach is to use pre-emergent weed control when grass is stronger and more mature.

Be aware that sod, when initially laid, will occasionally go into shock and turn brown. The sod is not dead and you should continue to water it.

Extremely hot or cold weather or above average rainfall with affect these instructions.

Mowing: Mow new grass when it attains a height of 4 to 6 inches. Do not mow if the ground is soggy. Set the mower height at approximately 3 inches. Be sure the mower blades are sharp to avoid tearing the grass.

C. New Shrub and Tree Care

The landscaping around your home has been planned by a professional landscape designer. All trees and shrubs are nursery grown, and a landscape contractor handled the initial planting. The homeowner is responsible for maintaining the new plantings. The type of tree or shrub will dictate the specific care needed, check with your local gardening center.

Caution: Do not remove or transplant trees and shrubs from their original locations.

Homeowner's Maintenance Guidelines
Watering: It is extremely important that new plants and trees be watered once a day for the first month, for one to three minutes on shrubs, and fifteen to twenty minutes on trees.

Fertilizing: Plants should be fertilized on a regular basis. Contact a lawn care specialist for proper maintenance guidelines.

Trimming: Hedges and plant should be trimmed on a monthly basis to encourage growth and conformity to the intended design.

MIRRORS & SHOWER ENCLOSURES

A. Mirrors

Homeowners Maintenance Guidelines

Clean bathroom mirrors and shower enclosures with an ammonia-free spray glass cleaner and a soft cloth, wiping several times to remove all glass cleaner residue. Most mirror failures are at the edges where "spillover" solutions attack the backing. By applying cleaner to the cloth rather than the mirror, this can be prevented. Do not use abrasive cleaners which will permanently scratch and mar mirror or glass surfaces. Do not expose mirror products to salt air for extended periods of time. Humidity, heat and dampness can cause permanent damage; therefore, provide adequate ventilation in rooms with mirrors.

Some mirrors will have some minor imperfections. This is perfectly normal. All scratches and other defects in mirrors and glass tub/shower enclosures must be reported to your builder at time of the orientation/walk-through and not after closing.

The following is a list of common acceptable defects:

- Slight hairline face and back scratches
- Slight pinhead bubbles or seeds
- Slight rubs
- Slight discoloration
- Slight dings or bruises

B. Shower Enclosures

Homeowners Maintenance Guidelines

Shower enclosures create extreme amounts of moisture, therefore frequent checking of joint areas is recommended. Check caulking periodically to ensure against leaking. The homeowner is responsible for recaulking as needed. The use of clear silicone is not recommended as it yellows with age.

PAINTING & CAULKING

Introduction

The interior walls of new homes are generally painted with a latex paint. We strongly recommend that touch-up paint be used instead of washing the walls. The exterior trim of your home have been painted with a quality exterior paint.

A. Interior and Exterior Paint

Painting Note:

The builder cannot guarantee that painting repairs requiring new material will match the color of the existing material. Paint repairs may show slight variations in color as a result of weathering, aging or pigment variations in different paint manufacturing runs. Color variations are normal. Fading is also normal and the degree is dependent on climate conditions.

Touch-Up: Paint touch-up is visible under certain lighting conditions.

When doing paint touch-ups, use a small brush, applying paint only to the damaged spot. Touch-up may not match the surrounding area exactly, even if the same paint mix is used. When it is time to repaint a room, prepare the wall surfaces first by cleaning with a mild soap and water mixture or a reliable cleaning product.

Regular attention will preserve the beauty and value of your home. Check the painted and stained surfaces of your home's exterior annually. Repaint before much chipping or wearing away of the original finish occurs, this will save the cost of extensive surface preparation. Climatic conditions control the chemical structure of the paint used on the exterior. Over time, this finish will fade and dull a bit.

When you paint the exterior of your home, begin by resetting popped nails and removing blistered or peeling portions of paint with a wire brush or putty knife. Sand, spot with primer and then paint the entire area. Use a quality exterior paint formulated for local climate conditions.

Avoid having sprinklers spray water on the exterior walls of your home.

Cracking: as it ages, exterior wood trim will develop minor cracks and raised grain. Much of this will occur during the first year. Raised grain permits moisture to get under the paint and can result in peeling. This is not a defect in materials or workmanship. Paint maintenance of wood trim is your responsibility.

Cleaning Exterior Painted Surfaces: Lack of or little sunlight, moisture and damp weather conditions may cause the formation of mildew or fungus on the exterior. Mildew or fungus can be removed by carefully washing the affected area with a water-diluted household bleach. The building is not responsible for mildew or fungus build-up. See Exterior Wall Finishes for further information.

Cleaning Flat-Latex Painted Surfaces: In many homes an off-white, lead-free latex paint is applied to the interior walls of the home. This is not a washable paint and will smudge if cleaned. We do not recommend washing these surfaces, but instead suggest using touch-up paint to cover paint scuffs and marks.

Cleaning Semi-Gloss Painted Surfaces: An off-white, lead free semi-gloss paint may be applied to interior wood trim and doors. These surfaces may be cleaned with a sponge and lukewarm water. The less moisture on the sponge, the better. Wipe quickly with a gentle washing pressure from top to bottom without allowing the solution to run down the door or trim. If the water does not work, try the same procedure using a small amount of mild detergent mixed with water. Once complete, lightly rinse the washed area with plain water and allow to dry.

B. Caulking

Caulking is a building joint sealant used where two dissimilar materials are joined. In time, caulking hardens and cracks and should be renewed prior to any repainting.

Homeowner's Note: Caulking is a homeowner's responsibility. Caulking around windows and doors should be checked and recaulked at least once a year.

Exterior caulk will eventually shrink, separate and deteriorate. This will cause the caulking to pull away from surfaces and create areas for water and air to infiltrate. This should be monitored constantly because moisture can work its way behind wood trim or siding and cause rotting. Pay particular attention to the

caulking at doors and windows, if separation of the caulking occurs, it can result in leaks. When recaulking on the exterior, use a product that paint will adhere to.

Homeowner's Maintenance Guidelines

Changes in temperature and humidity cause all building materials to expand and contract. Dissimilar materials expand and contract at different rates. This movement results in separation between materials, particularly dissimilar ones. You will see the effects in small cracks in drywall and in paint, especially where moldings meet drywall, at mitered corners and where tile grout meets tub or sink. While this can alarm an uninformed homeowner, it is normal.

Shrinkage of the wood members of your home is inevitable and occurs in every new home. Although this is most notable during the first year, it may continue beyond that time. In most cases caulk and paint are all that you need to conceal this minor evidence of a natural phenomenon. Even though properly installed, caulking shrinks and cracks. Maintenance of caulking is your responsibility.

Acrylic Latex with Silicone Caulk: An all purpose caulk that is mildew resistant, flexible and paintable.

Latex Caulk: Latex caulking is appropriate for an area that requires painting, such as along the stair stringer or where wood trim meets the wall.

Silicone Caulk: Caulking that contains silicone will not accept paint. It works best where water is present, for example, where tub meets tile or a sink meets a countertop.

If you are unsure of what type of caulk to use for a specific job you may want to consult a sales professional at your local hardware store or home improvement center.

Solutions to Common Painting Problems

Problem	Likely Cause	Solution
Exterior paint peeling	Surface not cleaned.	Scrape, sand, prime and repaint.
Blisters in paint.	Moisture/solvents under paint surface.	Scrape, fill resulting depression, sand, prime and repaint.
Wrinkling, runs and/or drips.	Poor adhesive caused by water or solvent trapped under paint.	Sand, smooth and repaint.
Interior and/or exterior caulking cracks or shrinks.	Paint applied too thick	Remove old caulking only if unsightly. Caulk open gaps
Efflorescence	Surface not cleaned. Moisture/solvents under paint surface.	Scrape, apply alkali neutralizer, repaint.
Bleeding wood knots	Alkali compounds on foundation.	Sand, apply stain killer, repaint.
Mildew on painted surfaces.	Wood resin seeping out. Fungus from moisture and little sunlight.	Carefully wash with water-diluted chlorine bleach.

PLUMBING SYSTEM

Introduction

In most cases, minimum homeowner maintenance is all that the plumbing system requires. Attending to small problems as they occur keeps them from becoming larger, and more costly problems later on.

A. Water Lines

Your home is served by a city water supply. The pipes that carry water into the home are designed to resist rust and corrosion.

Freezing Pipes: Provided the home is heated at a normal level, pipes should not freeze. Set heat at 65° F if you are away during winter months. Keep garage door closed to protect plumbing lines that run through this area. Shut off hose bibs and drain them prior to colder winter temperatures.

B. Main Shut-off Valve

This is the center of the plumbing system, the point at which the main water line comes into the home. If a major plumbing problem occurs, turn off the main shut-off valve to prevent flooding. It is a good idea to show every family member where the shut-off valve is, explain how to close it in case of an emergency, and to mark it with an easy-to-locate identification tag.

C. Water Intake Valves

Most plumbing fixtures in the home have a water intake valve to individually shut off the water to that

fixture for minor repairs and emergencies. Show family members how to operate them and where to locate them and where they are located on sinks, bathtubs, showers, toilets, water heater, washing machine and laundry tub. Toilet valves are behind the toilet and sink valves are under the sink. Typically these white toilet valves are pulled to turn **off** the water and pushed in to turn the water back on.

D. Drain Traps

Every plumbing fixture in the home is equipped with a drain trap, a J-shaped pipe that holds water and acts as a barrier to keep airborne bacteria and sewer gas odors from coming back into the home. If a sink or bathtub fixture is not used frequently, turn it on periodically to replace evaporating water and to keep the water trap barrier intact which keeps sewer gas smell from entering the home.

Homeowner's Maintenance Guidelines

Drain traps can be cleaned by putting 3 tablespoons of ordinary washing soap (not baking soda) into the drain. Add a little hot water, let stand for 15 minutes, then flush with hot water. Use a rubber plunger to unclog a blocked toilet.

Caution: *Do not pour grease into drains or toilets, or use caustic cleansers to open plugged drains. Do not use a plunger with any drain cleaning chemical. When using a chemical drain cleaner, carefully follow the manufacturers safety precautions and product directions.*

E. Sanitary Sewer Lines

In the final stages of preparing your home for move in, the plumber tested and flushed the sewer lines to ensure they were clear and working properly.

Homeowner's Maintenance Guidelines

Do not put hair, grease, lint, garbage, heavy tissue, disposable diapers or sanitary materials into the sewer system.

When operating the garbage disposal, always use a generous amount of cold water to keep the sink drain clear and the disposal motor cool.

Tree roots causing breaks in sewer lines or main lines are a homeowner's responsibility.

F. Fire Sprinklers

Should your home include Fire Sprinklers: The entire system including a "Testable Dual Check Valve" which was tested as required by code after installation of the system.

It is required to have the "Dual Check Valve" inspected/tested annually. All costs related to this testing is the homeowners responsibility.

Most municipalities will mail the homeowner an annual letter requesting the testing. When the testing is performed it is required that the testing party is certified in backflow testing.

G. Rough-Ins

If you purchase rough-in drains for a future lower level bath, your contractor will need to remove some concrete to determine the final drain location and create proper fixture seating. Maronda does not adjust rough-in locations after closing. To insure a bath configuration consistent with our blueprint, please purchase the complete bath option at contract.

Solutions to Common Plumbing System Problems

Problem	Likely Cause	Solution
No hot water from electric water heater	Tripped circuit breaker.	Check and reset circuit breaker.
No hot water from electric water heater.	Temperature setting too low.	Adjust temperature setting
Hot water recovery is slow.	Burned out heating element.	Replace heating element. Check circuit breaker.
Toilet runs constantly.	Water level in tank is too high.	Adjust fill valve.
Toilet makes loud noise when flushed	Ball cock in water tank is not working properly.	Replace ball cock in toilet water tank.
Toilet makes dripping or gurgling noise.	Warped or worn out flapper valve.	Replace flapper valve.
Toilet backing up or overflowing	Obstruction in line.	Turn toilet intake valve off and plunge toilet.
Hose sprayer in kitchen sink drips.	Dirty or defective.	Clean or replace.
Slow draining sink or bathtub.	Blockage such as hair at drain	Remove hair or blockage.
Water flow from faucet is reduced	Aerator at tip of faucet is clogged	Unscrew aerator screen and rinse.
Water splatters out of faucet.	Air in water supply line.	Open all faucets in home for 5 minutes.
Water leaking from under sink.	Loose plumbing fittings.	Hand tighten couplings on drain pipes.
Water dripping from shutoff valves.	Lose packing nut.	Open valve all the way, then gently tighten nut.
Garbage disposal clogged.	Obstruction in line.	Use disposal wrench on bottom of disposal.
Garbage disposal will not operate.	Tripped reset button.	Check reset button on bottom of disposal.

PLUMBING FIXTURES

Introduction
The plumbing fixtures in most homes include the water heater, bathtubs, showers, toilets, and sinks.

Note: As equipment technology changes frequently, the Manufacturer's Service Manuals will supersede all recommendations and procedures contained in this manual.

A. Water Heater

The electric water heater is equipped with an automatic temperature and pressure relief valve, a safety feature that opens and releases excessive pressure or heat build-up. Should this occur, water will flow from the tank until both temperature and pressure are reduced to safe levels.

Homeowner's Maintenance Guidelines
Hot Water Temperature: Water Heater temperature is set at 120° F by the Manufacturer. While low temperature settings reduce utility cost, bear in mind that dishwashers do not operate properly with settings below 120° F.

Do not store combustible items, oily rags, clothing, broom or dust mops near the water heater, since this presents a potential fire hazard. Do not use the top of the water heater as a storage shelf.

Scale: Small amounts of scale deposits will collect and settle to the bottom of the water tank. Remove this residue annually by draining the tank. Shut off the power first, using the appropriate circuit breaker in the electrical panel box. Attach a garden hose to the valve and run it outside. Then open the valve at the bottom of the water heater, allowing the residue to drain out or until the water runs clear. If you live in a hard water region, a water softener will reduce the need for more frequent draining.

Do not completely drain an electric water tank without first shutting off the water heater circuit breaker. Do not turn circuit breaker on until the tank is full of water.

Element Cleaning or Replacement: The heating elements in the water heater will require periodic cleaning. The frequency is determined in part by the quality of the water in your area. Again, refer to the manufacturer's literature for step-by-step instructions and drawings, or contact an authorized service company.

No Hot Water: If you discover you have no hot water, check the breaker, the temperature setting and the water supply valve before calling for service. Refer to the manufacturer's literature for locations of these items and other troubleshooting information.

Pressure Relief Valve: At least once a year, manually operate the pressure relief valve. Stay clear of the discharge line to avoid injury. See manufacturer's literature for diagrams and detailed instructions.

B. Fixtures

Kitchen and bathroom sinks, toilets and bathtubs are made with cultured marble, plastic or stainless steel.

Homeowner's Maintenance Guidelines

To clean, use a non-abrasive spray cleanser and sponge. Dropping heavy objects can chip or crack the surface and may produce permanent staining. Do not leave steel wool pads on sink surfaces, as they will rust and stain the surface.

Be aware that continuous action toilet bowel cleansers, placed in the toilet water tank, will prematurely wear out the rubber tank flapper and may discolor the bowl. Follow the manufacturer's recommendations for cleaning and maintenance.

C. Kitchen Sinks/Stainless Steel

Homeowner's Maintenance Guidelines

For routine cleaning, use a non-abrasive household cleanser with warm water and a sponge. DO not scrape the surface with utensils, pots or pans. Do not leave leftovers in sink or strainer, particularly tea bags and coffee grounds,which contain harmful acids. Regular washing soap, not baking soda, should be added to the drain to keep it grease and soap free.

Do not clean stainless steel sinks with steel wool or metal brushes, and do not leave rubber mats in the sink since they trap water and produce surface discoloration. To restore luster to stainless steel, apply a small amount of mineral oil with a soft cloth then wipe dry.

The following products are among those recommended by the manufacturers to clean your cast iron sink: Dow Bathroom, Top Job, Get Gloss, Bon Ami & Fantastic.

D. Garbage Disposal

Homeowner's Maintenance Guidelines

Always use cold water when disposal is working. Corn cobs and husks, bones, celery and any other food that shreds should not be put into the disposal. If the machine becomes jammed, use the wrench to free the mechanism and try again. The disposal will rust if not used regularly. If you are going to be away for an extended period of time, a teaspoon of oil will help prevent the mechanism from freezing.

E. Bathroom Sinks

Homeowner's Maintenance Guidelines

Sink surfaces can be easily chipped and stained, so treat them accordingly. Prevent hair accumulation clogs by periodically removing the stopper for cleaning or purchase a rubber hair collector. Avoid setting lit cigarettes on the edge of the sink, as they will burn and permanently damage the surface.

F. Toilets

A water-saving regulation went into effect in 1993. It prohibits the manufacture of toilets that use more than 1.6 gallons of water per flush. In the search for a balance amount comfort, convenience and sensible use of natural resources, the government conducted several studies. The 1.6 gallon toilet turned out to be the size that consistently saves water.

As a result of implementing this standard, flushing twice is occasionally necessary to completely empty the toilet bowl. Even though you flush twice on occasion, rest assured that overall you are saving water and you have complied with the law.

Running Toilets: To stop running water in the toilet, check the adjustment fill valve in the tank. You will most likely find it needs adjustment, preventing the valve from shutting off completely. Also check the chain on the flush handle. If it is too tight, it will prevent the rubber stopper at the bottom of the tank from sealing, resulting in running water.

G. Bathtubs, Showers & Tub-Shower Combinations

Homeowner's Maintenance Guidelines

Cleaning: Clean fiberglass tubs/showers, cultured marble tubs and sinks, fiberglass showers and tub-shower combinations, and shower stall floors with warm water and a non-abrasive cleanser. Clean glass shower doors with a commercial glass cleaner. Check bathtub stoppers and shower floor drain grates for hair accumulation. DO not use ammonia-based cleaners. Gel-Gloss is recommended for polishing cultured marble.

Do not step into a bathtub or tub-shower with shoes on. Gritty particles adhere to your shoe soles and will scratch the finish.

Re-Caulking of the Tubs and Showers: Over time, cracks and separations between tub or shower stall and wall surfaces or bathroom floors will appear. Maintaining these areas is critical since excessive moisture can severely damage underlying materials.

It will be necessary to re-apply a tub and tile caulk when the previous caulking has dried out or eroded. To re-caulk the area, use a tub and tile caulk available in local hardware stores. Do not use a clear silicone caulk, as it yellows with age. Begin by removing the old caulk and cleaning the area. Once the area is dry, apply fresh caulking to fill the vacant space, then smooth out the finish with a wet finger.

H. Whirlpool Tub

Caution: *Never run the pump motor without at least 2 inches of water above the jets. Running the pump with improper water levels will damage it. Always turn the pump off during draining. Do not add bath oils, bubble soap or any other liquids to the water.*

Homeowner's Maintenance Guidelines

1. Check for leaks periodically by looking around the base of the tub.
2. Every two or three months, fill the tub with hot water and add a small amount of liquid dishwasher non-foaming detergent. Run the pump for 10 minutes. This will clean the pipes and the pump's internal parts.

I. Interior Faucets

Interior faucets are either single-lever faucets or washer faucets.

Homeowner's Maintenance Guidelines

Single-Lever Faucets: The single-lever kitchen and bath faucet are low maintenance, washerless faucets. Should the cartridge ever need to be replaced, turn off the water supply under the sink, remove the handle assembly, and pull the cartridge out. Take the cartridge to a local plumbing supplier and match accordingly. Being sure to follow installation instructions.

Polished Brass Fixtures: Polished brass in humid regions is sure to pit and tarnish.
Besides the climate, there may be other catalysts that cause this reaction to occur. Cleaning agents, standing water, shampoos, toothpastes and personal hygiene products are among items that may heighten the tarnishing and pitting process. Any cleaning agent that contains harsh chemicals will most certainly wear through the protective coating applied to brass. The manufacturers of polished brass recommend the use of plain water and polishing with a soft cloth.

Chrome Faucets: Chrome Faucets should be cleaned with a soft damp cloth and a commercially accepted cleaner. Dry the faucet with a soft cloth. Never use an abrasive or ammonia based cleaner.

Washer Faucets: A washer faucet has a shut-off feature that requires light closing pressure to stop the flow of water. Do not apply too much pressure since washers can be damaged.

Faucet Aerators: Screened aerators screw into the spout of a faucet to add air to the flowing water which reduces splashing. Aerators are easy to remove for periodic cleaning. This should be done every 3-4 months.

Washer Replacement: Dripping faucets can dramatically increase water bills and represent the loss of a valuable natural resource. Over time, all washers will wear out and must be replaced. Neglecting to change washers may cause damage to the valve seat or to the entire faucet. Many homeowners prefer to do this simple replacement procedure themselves.

1. Turn off the water supply intake valve located under the sink.
2. Using a wide-jaw wrench, remove the hexagonal cap from the top of the faucet assembly. This may take a turn or two.
3. Remove the inside part, turn it upside down, and you will see a fiber washer held by a screw through it's center. This is the source of the leak. The screw is easily removed, but the washer itself may take a little prying to remove.
4. Match the new washer to the worn-out washer and replace it. Re-use the same screw if it is in good condition. Then reassemble the faucet.

J. Exterior Hosebibs

Exterior faucets are called hosebibs. To replace washers on standard exterior faucets, follow the same procedure for washer replacement, as stated above.

Check for leaks and replace washers as required since a leaking exterior faucet causes water damage. See washer replacement under Interior Faucets, this section.

Water back-flow prevention: Most new homes have a vacuum breaker installed on the exterior hose faucet. This device prevents backflow, and stops potentially contaminated water from flowing back into the home water supply system via the garden hose. These devices are a plumbing code requirement and may not be removed.

With a vacuum breaker installed, it is normal to hear a humming or vibrating noise throughout the home when the exterior faucet is in use. This is caused by the washers built into the back-flow preventer, and is not reason for concern.

Shut off hose bibs prior to colder winter temperatures.

ROOFING, GUTTERS & DOWNSPOUTS

Introduction

The roof of most homes consists of roofing felt, plywood or sheathing and shingles and included ice guard underlayment as required. Shingles are installed following manufacturer's guidelines and product specifications. For more information on roof sheathing and insulation, see section "Framing and Carpentry."

A. Shingle Roofs

Shingle roofs come in many different colors and styles. Shingle roofs provide water protection to the roof underlayment. As above, the builder is not responsible for damage to shingles caused by the homeowner.

The standard roofing material on all Maronda homes is asphalt fiberglass shingles. For added protection, we have used "sealdown" shingles. (The mastic is placed on the underside of the shingle, and once a hot sun hits the roof, it will stick fast to the shingle beneath it.) There is a possibility that the shingles may be lifted by a strong wind when first applied or if applied in the winter. Special care should be taken to avoid damaging your roof (surface or flashings) when installing television or radio antennas.

B. Flashing

Roof flashings are sheet metal trims used around roof openings, on vent stacks, roof vents and valleys. Their purpose is to channel water away from the house.

C. Gutters and Downspouts

Gutter channel water run-off from the roof to downspouts that guide the water away form the building structure.

Homeowner's Maintenance Guidelines

Gutters and downspouts should be inspected and cleaned regularly. Clear the gutter of accumulated debris such as leaves, twigs, branches, balls and other objects.

Gutters need to slope slightly downward to channel water to the downspout. Splash blocks can be properly positioned at the bottom of the downspout to direct water away from the foundation. Finally, the soil grade must slope away from the home. The best advise is to keep the gutters free of debris.

Gutters and downspouts should not leak but may overflow during heavy rain.

It is very important that gutters and downspouts are checked in spring and fall and should be kept clear of tree limbs, leaves, balls, ice build up, and other obstructions which will help stop the downspout form functioning properly. By properly maintaining the gutter from debris it will help prevent Ice Damming. In the winter months ice build up at the gutters can pull the gutters loose form the home. Ice can also cause water to back up under the shingles and leak into the home. The installation of gutter guards may aggravate ice damming problems. When investigating an insurance policy you may want to discuss this coverage with your insurance agent.

D. Vents

Vents should remain unobstructed year round. If your home has soffit vents and/or ridge vents, they should be cleared of debris. Ridge vents should be checked periodically to ensure they are secure and have not come loose in highwinds. Also, check that these vents have not been stepped on and deformed. Excessive heat buildup in the attic is usually caused by blocked air vents. This condition can be resolved by clearing all obstructions away from the vents to allow proper heat release.

There are a variety of attic vents that could be used on your home. The different types can be soffit vents (located in the eaves of your roof), ridge vents (found at the peak of your roof) and attic vents (sometimes known as whirly birds, turtlebacks and mushrooms). Familiarize yourself with all the different vents on your home.

SUBSURFACE CONDITIONS

Western Pennsylvania residents should be aware that mining has occurred and is occurring in this area and that mine subsidence insurance may be available to affected residents. The Mine Subsidence Insurance Program of the Pennsylvania Department of Environmental Protection (DEP) is located in McMurray, Washington County, Pennsylvania. If you want to know if your property is in the vicinity of a mine, you should contact the program at (724) 941-7100.

SHELVING

Introduction

Unless wood shelves are installed, shelves are fabricated of heavy gauge welded steel rod covered with a protective plastic coating. The shelving will support a static load of 75 pounds per 3 linear feet, evenly distributed.

STAIRS

Homeowner's Maintenance Guidelines

No known method of installation prevents all vibration or squeaks in a staircase. A shrinkage crack may develop where the stairs meet the wall. If this occurs, apply a thin bead of latex caulk and, when dry, touch up with paint.

WINDOWS / SCREENS

Introduction
Typically the windows in your new home are dual-pane glass and are framed in vinyl. The manufacturer has sealed all the glass to the frame and the frame has been attached to your home and caulked.

Note: *It is the homeowners' responsibility to check and recaulk all exterior frames. All window scratches or imperfections must be reported to your builder at time of orientation/walk-through, not after closing.*

Homeowner's Maintenance Guidelines
Cleaning Window Glass: Clean windows with a commercial glass cleaner or a cup of vinegar mixed with a gallon of warm water. Apply with a sponge or lint-free cloth, then dry and polish with paper towels. A rubber squeegee passed over glass surfaces will speed the drying and eliminate streaking.

Vinyl Windows: Abrupt changes in weather may cause aluminium windows to bind or stick. Should this occur, apply silicone spray to the window sash tracks. Aluminum window frames have a baked enamel finish and may be cleaned with a mild detergent solution. Be aware that aluminum window frames will weather due to exposure to the outside elements.

Window Condensation: The appearance of moisture that occurs when warm moist air comes in contact with a colder surface is called condensation. While moisture may appear on windows, this does not indicate a window problem. The most common cause is humid air outside the home hitting the cold surface of the window glass. Wipe up condensation as quickly as possible in order to avoid staining the drywall, window sill or caulking.

Weep Holes: In heavy rains, water may collect in the bottom channel of window frames. Weep holes are provided to allow excess water to escape to the outside. Keep the bottom window channels and weep holes free of dirt and debris for proper operation.

Window Screens: Window screens are provided with every new home, and their sole purpose is to provide ventilation when the windows are open. Screens are loose fitting and may not deter all insects from entering home. Window screens may be washed and rinsed using a mild household detergent.

Storing Screens: Many homeowners remove and store screens for the winter to allow more light into the home. To make re-installation more convenient, label each screen as you remove it. Use caution; screens perforate easily and the frames bend if they are not handled with care.

CAUTION: *Window screens will not prevent children from falling through open windows to the ground below. The screen is not a barrier, and the fastening system for the screen will not support any weight beyond the screen itself. Never allow children near an opened screened window, or place any weight on or push against a window screen. Do not place furniture near windows so that children have easy access.*

3.40 **Note: Replacement of any window voids any related warranty item.**

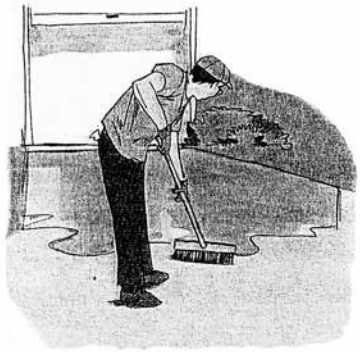
Solutions to Common Window Problems

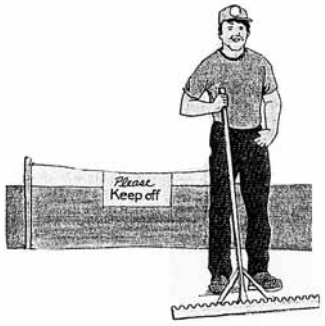
Problem	Likely Cause	Solution
Vinyl window binds or is difficult to open	Broken window balance.	Replace balancer.
Vinyl window binds or is difficult to open	Paint or dirt on jambs	Clean jamb and spray with silicone.
Vinyl window will not stay open.	Weak window balancers.	Replace balancer or adjust tension rod.
Vinyl window will not slide up or down	Tension rod jammed.	Adjust balancer or tension rod.
Vinyl window sash comes out when fully opened.	Tension rod clips on side jambs left in open position.	Position clips in closed position before opening.
Vinyl window will not lock properly	Debris in track or window not aligned properly	Clean track or check alignment at middle when closing.
Condensation on inside surface of window.	High humidity inside home.	Reduce humidity with exhaust
Cracked glass.	Normal settlement.	Replace cracked glass.

WOOD DECKS

If your home included a wood deck, it is built without any staining or sealer. Therefore, it is recommended that a sealer/stain be applied during the first year to preserve it's natural finish and minimize the amount of twisting and warping of the womanized lumbeer.

Decking material will not be replaced during the first year unless it is a safety or trip hazard.

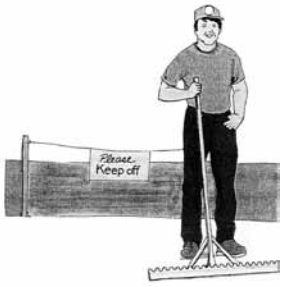




The How, Why and When of Asphalt Driveway Care

Dear Homeowner,

Congratulations on your new asphalt driveway! We are pleased that you have chosen us as your paving contractor and confident this driveway section will answer all of your questions for a longer lasting driveway.



Since the liquid asphalt in blacktop needs time to harden and cure, usually 6-12 months, your driveway will remain somewhat soft and pliable until then. You may walk on your new driveway immediately, but keep automobile traffic off it for at least 3 full days and longer in hotter temperatures.

Although not as hard as concrete, your asphalt driveway has many advantages and when fully cured will be very durable.

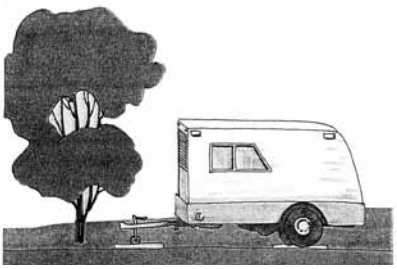
Your new asphalt driveway will soften and harden as temperatures rise and fall. Watering down your driveway with a hose on hot days will cool and temporarily harden the asphalt. This is helpful but not mandatory. If soap suds should appear do not be alarmed. This is a reaction between the diesel fuel found in asphalt and a high chlorine content found in some city water. Although every effort is made to avoid puddles in your driveway, some small ones are inevitable depending on the natural slope and drainage of your ground.

Your new driveway can be scarred by automobiles starting out too fast, pulling in too quickly, turning around in tight areas and just plain driving too fast.

During the first 6-12 months while your driveway is curing don't park in the same spot everytime. Do not turn your steering wheel back and forth when your car is not moving.

Avoid using jack stands or car ramps unless a piece of plywood is placed under them to help distribute the weight.

Excessive weight from large heavy vehicles can depress your new driveway. Keep oil trucks, concrete trucks and any other heavy trucks off your new driveway. When storing campers and boats for long periods of time, place of plywood under the tongue jack and also under the tires.



Lawn Chairs, bicycle and motorcycle kickstands exert weight on concentrated areas and depressions in your new driveway. Especially watch out for those pointy **high heels** during the warm months when your driveway is new.

The edges are the weakest park of your driveway due to the lack of side support. Avoid driving on the edges since they will crack and crumble in time. We suggest building up the sides of your driveway with topsoil to approximately one inch from the top of the driveway to allow room for sod growth and water drainage. This will support the edges and enhance the appearance after grass is grown.

Your driveway may look smoother in some areas than in others because of the makeup of asphalt. Asphalt has various sizes of stone, sand, liquid asphalt, and other ingredients which cause a varied texture of the surface. Also, driveway areas that have been raked and spread with hand tools may appear different in texture from those spread by machine.

Although every effort is made to remove and kill any grass, weeds, and dandelions before your driveway is paved, they sometimes have very deep roots. If any should push up through your driveway contact your paving contractor for instructions. He may suggest using a spot weed killer to simply correct this.

Avoid gasoline, oil, anti-freeze, power steering and transmission fluid spills and leaks. These will dilute the liquid asphalt in your driveway. Any hole left be these spills should be filled with cold patch. Any hairline cracks that may have developed over the winter due to the contraction and expansion of the ground should be filled with crack filler or sealer. These products can be purchased from your local building supply store or can be professionally applied by your contractor.

To preserve your new driveway, it is advisable to seal it after it has been paved. Unprotected driveways remain porous, dry out, become rough, and lose their life rapidly. This results in deterioration, ridges, and upheaval due to frost and freezing. Asphalt is also softened and broken up by gasoline, lube oil, grease, road salts and anti-freeze which drip from cars. Sealer protects asphalt with a coating that is impervious to these harmful elements and also fills and seals hairline cracks. Sealing too soon, however, may cause damage to your new driveway.

Consult your paving/sealing contractor for his recommendation on the best time to seal your driveway. With a professional job and scheduled maintenance, you can preserve the life and beauty of your new driveway for many years to come.

CHAPTER 4

Glossary of Construction Terms

Home Buyers Glossary of Construction Terms

Aerator - A small, removable extension at the tip of a sink faucet that mixes streaming water with air to reduce

Air hammer - A banging noise in plumbing pipes caused by air infiltration.

Airway - The space between roof insulation and roof boards which allow for movement of air.

Alkali - A soluble mineral salt or mixture of salts capable of neutralizing acids.

Anchor bolts - Bolts that secure a wooden sill plate to a concrete or masonry floor or wall.

Asphalt - A residue from evaporated petroleum, insoluble in water but soluble in gasoline. Melts when heated.

Attic ventilators - Screened openings provided to ventilate an attic space.

Ball cock - A device in a flush toilet consisting of a valve connected by a lever to a floating ball. The valve closes when the ball is raised and opens when it is lowered.

Baseboard - Molding used to trim the upper edge of interior baseboards.

Beam - A structural member transversely supporting a load.

Bearing wall - A wall that supports any vertical load in addition to its own weight.

Brace - An inclined piece of framing lumber applied to wall or floor to stiffen the structure. Often used on walls as temporary bracing until framing has been completed.

Brick veneer - A facing of brick laid against and fastened to sheathing of a frame or tile wall.

Casing - Molding of various widths and thicknesses used to trim door and window openings at the jambs.

Caulk - Caulk is a building joint sealant used where two dissimilar materials are joined. In time, caulk hardens and cracks and should be renewed prior to any painting.

Circuit breaker - A switching device, located in the main electrical panel, that opens and closes electrical circuits and automatically shuts off electricity to a circuit should it become overloaded. Once the electrical load is reduced, the breaker switch can be turned back on to resume normal service.

Concrete dusting - A fine dust that accumulates on finished concrete surfaces.

Condenser - An exterior unit that is part of the air conditioning system which expels heat into the outside air.

Conduit, electrical - A pipe, usually metal, in which insulated electrical wire is installed.

Corner bead - An angled metal edging used to protect and form an edge where drywall panels meet at outside edges.

Damper - A device in a fireplace that controls the air draft allowed into the fire.

Delamination - The separation of the top piles or laminate from the base to which they are attached. In vanity and kitchen countertops, the warping or detachment of laminate material from the wood substrate.

Dethaching - The loosening and/or removal of matted grass and leaves from existing lawns, which - allows the grass to breathe and therefore promotes healthy growth.

Downspout - A pipe, usually of metal, for carrying water from roof gutters.

Drywall - Also known as gypsum board or sheetrock, these large sheets are attached to the wall studs and ceiling framing to construct the walls and ceiling of the home.

Eaves - The margin or lower part of a roof projection over a wall.

Efflorescence - A white powdery substance that can form on new block, brick, or stucco finishes. It is composed of water soluble salts that are present in masonry materials and that rise to the surface via water evaporation.

Face frame - The front of kitchen and bathroom cabinets, to which the hinged doors attach.

Face nailing - Nailing through a finished, exposed surface so that the flat top of the nail head is still visible after nailing.

Facia or Fascia - The exterior horizontal trim around rafters. Also positioned directly behind gutters and over gable trim boards.

Filler board - Cabinet grade wood used to fill gaps that occur between cabinets and wall openings.

Fillers - A wood putty used in preparation for painting to fill holes or cracks in wood.

Flashing - Sheet metal or other material used in roof and wall construction to protect a building from rain water penetrating the house structure.

Footing - A masonry section, usually concrete, in a rectangular form wider than the bottom of the foundation wall or pier it supports.

Foundation - The supporting portion of a structure below the first-floor construction, or below grade, including the footings.

Frame construction - A type of construction in which the structural parts are wood or depend upon a wood frame for support.

Gable - The portion of the roof above the eave line of a double-sloped roof.

Gabled louvers - A vent with louvers located at the peak of gable ends.

Graphite lubricant - A finely powdered graphite used as a lubricant.

Ground fault circuit interrupter (GFCI) - A specialized electrical device that will interrupt electrical power where a weak electrical loss of ground occurs. Normally installed in areas where water may be present.

Grout - A white or colored plaster-like mortar compound used to fill spaces between ceramic tiles.

Header - A heavy timber and/or concrete beam that spans open spaces in walls, over doors and windows, and provides support to structural members above it.

Hip roof - A roof that rises by inclined planes from all four sides of a building.

Honeycomb - In concrete, an open cell like surface texture that occurs while pouring the concrete.

Hose bib - An exterior faucet connection for lawn and garden hoses.

Insulation - Any material high in resistance to heat transmission that, when placed in the walls, ceilings, or floors of a structure, will reduce the rate of heat flow.

Jamb - The side and head-lining of a doorway, window or other opening.

Joint compound - A plaster-like compound, used with drywall tape, to join sheets of drywall into a smooth, continuous panel.

Joists - The horizontal support members used in constructing a floor.

Keeper plate - The metal plate that keeps a door lock latch firmly in place.

Lockset - A door lock.

Louver - An opening with a series of horizontal slats, so arranged as to permit ventilation but to exclude rain, sunlight or vision.

Masonry - Stone, brick, concrete, hollow-tile, concrete block, gypsum block or other similar building units or materials or a combination of the same, bonded together with mortar to form a wall, pier, buttress or similar mass.

Mastic - A construction adhesive that is thick and waterproof. Used on roofs.

Moldings - Shaped strips of ornamental wood used around doors and windows. Also used for base molding, tile molding, as chair rails and for exterior area molding. Moldings finish the junction of different materials or shapes.

Nail pops - Nails that come loose from a stud and push joint compound up. Caused by normal wood shrinkage and home settlement.

Pointing - The filling and finishing of broken mortar and stone cement masonry joints.

Ponding - The collection of water on driveways, walkways, or lawns. Ponding for excessive periods of time is indicative of grading problems.

Rafter - One of a series of structural members of a roof designed to support roof loads. The rafters of a flat roof are sometimes called roof joists.

Resilient flooring - Vinyl flooring used in areas such as kitchens, halls, bathrooms and laundry rooms. It is capable of withstanding shock without permanent deformation.

Ridge vent - An open vent system located along roof peaks, which in conjunction with soffit vents, creates ventilation through the passage of natural air.

Roof sheathing - Boards or sheet material fastened to roof rafters on which the shingles or other roof covering is laid.

Scaling - In concrete, the breaking away of the top surface of the concrete, caused by a freeze/thaw cycle. In painting, the flaking or peeling away of paint.

Sheathing - The structural covering, usually wood boards or plywood, used over studs or rafters of a structure. Structural building board is normally used only as wall sheathing.

Shingles - Roof covering of asphalt, asbestos, wood, tile, slate or other material cut to stock lengths, widths and thicknesses.

Siding - The finish covering the outside walls of a frame building, whether made of horizontal weatherboards, vertical boards with battens, shingles or other material.

Sill - The lowest member of the frame of a structure, resting on the foundation and supporting the floor joists or the uprights of a wall. The member forming the lower side of an opening, as a door-sill or window-sill.

Sill plates - A support member laid on the top of the foundation wall that serves as a base for the wall framing.

Silicone - A synthetic lubricating compound with high resistance to temperature change and water. When added to caulking, it extends elasticity properties and increases the life of the caulking.

Soffit - Usually the underside of an overhanging cornice or roof.

Soffit vent - A vent located under the ceiling of a roof overhang.

Spackle - See joint compound.

Spalling - Flaking or chipping of stone or other masonry material. Similar to scaling, but the chips and flakes are larger.

Stud - One of a series of slender wood or metal vertical structural members placed as supporting elements in walls and partitions.

Sub-flooring - A wood sheet flooring directly over the joists that supports the underlayment or floor covering.

Swale - The soil contour on a building lot deliberately shaped to channel rain water away from the home.

Tack strips - A wood strip with exposed tack points that is attached to the sub-flooring and holds stretched wall-to-wall carpeting in position.

Tread - The horizontal board in a stairway on which the foot is placed.

Trim - The finish materials in a building, such as moldings, applied around openings or at the floor and ceilings of rooms.

Trusses - Engineered wood structural members used to construct floors and roofs.

Turnaround - An additional section of driveway where cars can be turned around.

Underlayment - A flooring layer over the base subflooring, over which tile or resilient floor covering is laid.

Valley - The internal angle formed by the junction of two sloping sides of a roof.

Vacuum breaker - Also called a back-flow preventer, this device is placed on exterior faucets to allow water to only flow out of the home.

Valve seat - An interior part of the faucet valve assembly where the valve rests.

Wall ties - The metal pieces that tie masonry veneer to the frame of the home, or, when pouring concrete, the metal pieces that hold concrete foundation wall forms in place until the concrete cures.

Washers - Round, rigid rubber or plastic discs used as a sealing device in water faucet valves.

Weather stripping - A weather insulating strip of material placed around doors and windows to reduce water entry into the home. Also reduces air infiltration into the home or the escape of conditioned air out of the home.

Washouts - An area where water has produced soil erosion.

Window balance - A counter balance device in window housings, that assists with the opening and closing of a window, and then keeps the window in position.